



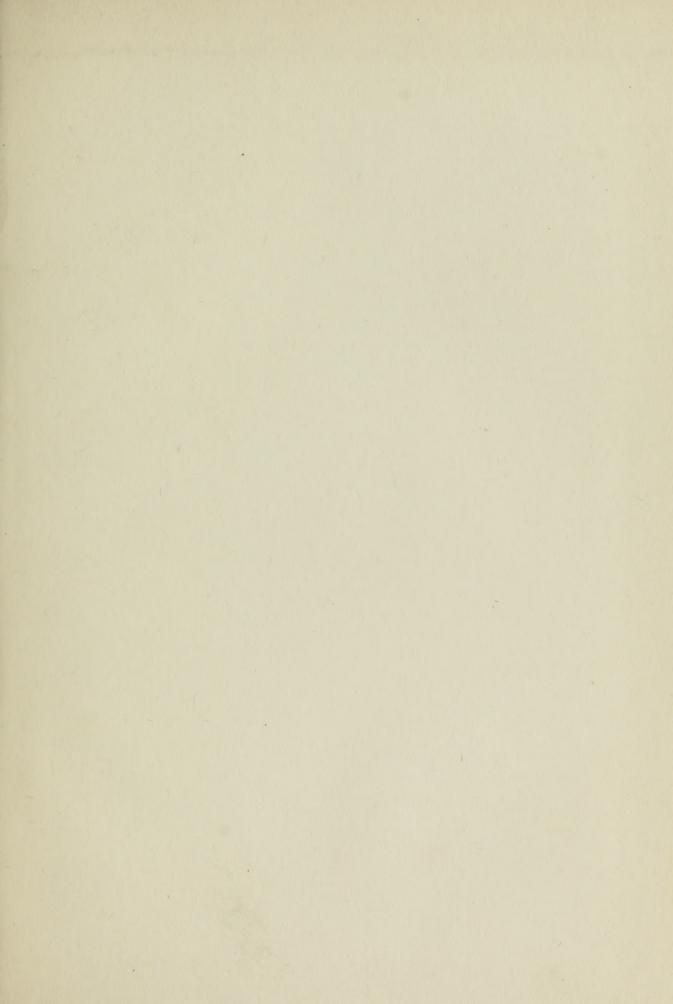
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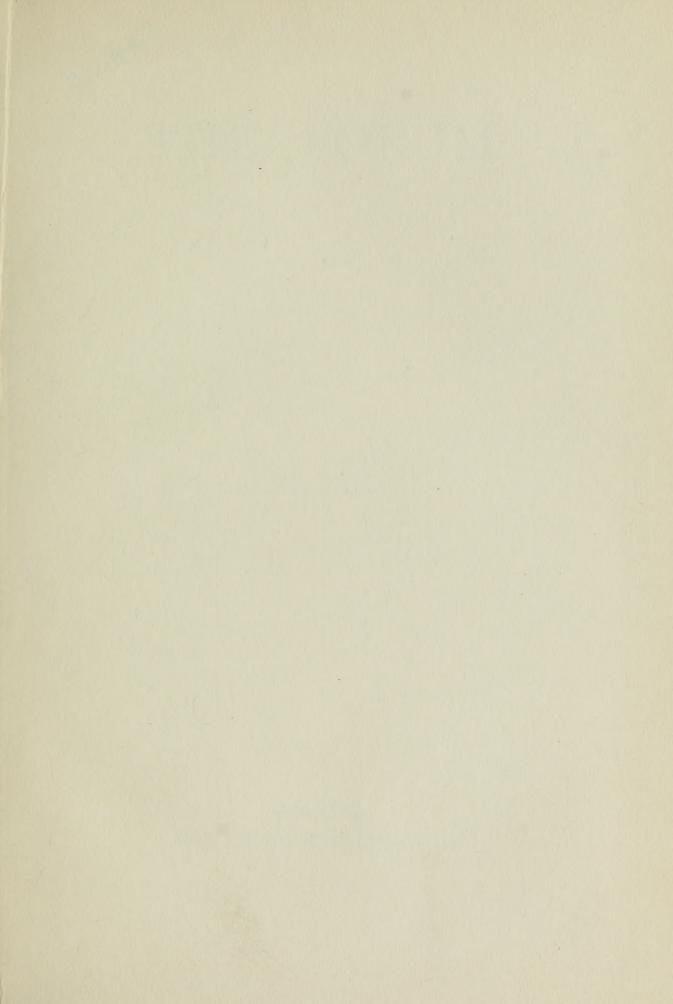
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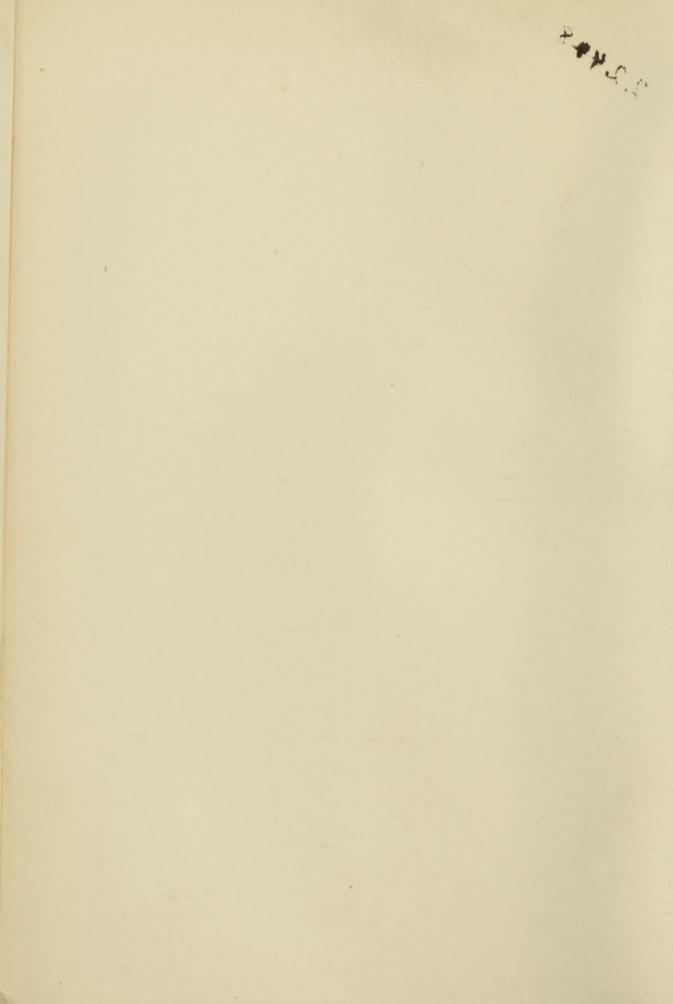
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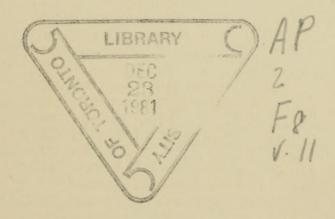
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# THE FORUM.

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VOL. XI.

## The Forum.

### MARCH, 1891.

### THE NICARAGUA CANAL.

No other measure of public policy now submitted to the people of the United States is of such wide-reaching importance as the proposed construction of the Nicaragua Canal, and it is the duty of the organs of public opinion to state the elements of the problem that it offers, so that their readers may intelligently judge whether the United States should aid in its execution, and, if so, to what extent and in what manner. Hitherto such questions as this have been hidden under the cloak of diplomacy; but now, by the action of the Senate in removing the injunction of secrecy from negotiations with foreign powers, this great measure is open to the inspection of the American people, and is submitted to their judgment.

By a treaty, signed on December 1, 1884, between the United States and the republic of Nicaragua, provision was made for the construction by the United States of an inter-oceanic canal from the Atlantic to the Pacific, across the territory of that republic. It was sent to the Senate on December 10, 1884, accompanied by a message from President Arthur recommending its ratification in strong and earnest language; but it was not formally acted upon prior to the inauguration of President Cleveland, on March 4, 1885. Mr. Cleveland, a few days thereafter, formally withdrew the treaty from the consideration of the Senate, and, in his

annual message to Congress, in December of that year, stated as his reason for so doing that it contained "propositions involving paramount privileges of ownership or right outside of our own territory, coupled with absolute and unlimited engagements to defend the territorial integrity of the state where such interests lie." He further said:

"Maintaining, as I do, the tenets of a line of precedents from Washington's day, which proscribed entangling alliances with foreign states, I do not favor a policy of acquisition of new and distant territory, or the incorporation of remote interests with our own."

Subsequently, on April 25, 1887, the republic of Nicaragua, deeply interested in the construction of the work, granted to a private association of citizens of the United States a concession of the right to build an inter-oceanic canal. A like concession was made by the republic of Costa Rica, situated on the southern borders of the San Juan River and Lake Nicaragua. The association obtaining these concessions was incorporated by an act of Congress approved February 29, 1889, under the name of "The Maritime Canal Company of Nicaragua." It appears from the terms of these concessions that the Maritime Canal Company is invested with the clear and unquestionable right to construct the work proposed, to sell its stock and bonds for the funds required, and to seek the aid of foreign powers, especially that of the United States. The American company thus authorized and organized has supplemented the previous examinations and reconnaisances of officers of the army and navy of the United States by careful detailed instrumental surveys, measurements, soundings, and estimates of cost; so that the precise work to be done and the difficulties to be overcome are known. This work has been revised by a board of consulting engineers, and, before any aid shall be rendered by the government, it is to be further revised by officers of the army and navy of the United States on whose skill and judgment entire reliance can be placed. The revised estimates place the cost of the work at \$73,176,308, to which is added for possible contingencies \$14,633,262; and to this must be added interest on the money invested during the progress of the work, making the aggregate cost about \$100,000,000. The Maritime Company has entered upon the actual work of construction, and satisfactory progress has been made, so that the cost, location, and engineering problems involved are fully known. It is apparent that the physical difficulties to be overcome are not greater than those of many of the works of improvement undertaken within our own country, for the highest part of the water way is to be only 110 feet above the two oceans -a less altitude than that of the base of the hills which surround the city of Washington. The works proposed include a system of locks, similar in character to the one built by the United States at the falls of Sault Sainte Marie and to those constructed by Canada around the falls of Niagara. A single dam across the San Juan River, 1,250 feet long and averaging 61 feet high, between two steep hills, will insure navigable waters of sufficient depth and width for the commerce of the world, for a length of 120 miles. The approaches to this level, though expensive, are not different from similar works, and will be singularly sheltered from floods and storms. Of the distance of 169.4 miles from ocean to ocean, 142.6 miles is to be accomplished by slack-water navigation in lake, river, and basins, and only 26.8 miles by excavated canal. The greatest altitude of the ridge which divides the water of Lake Nicaragua from the Pacific Ocean does not exceed at any point 42 feet above the lake.

Perhaps the chief engineering difficulty is in the construction of harbors at the Pacific and Atlantic termini of the canal; but that at Greytown, on the Atlantic coast, which is considered the most formidable, has already been partially built. Vessels requiring 14 feet of water can now safely enter this harbor and discharge their cargoes at the docks of the company. The obstacles are not to be compared with those encountered in the attempted construction of the Panama Canal, or with those which were easily overcome in the construction of the Suez Canal; and the whole work, from ocean to ocean, is free from the dangers of moving sand and destroying freshets. Lake Nicaragua itself is one of the most remarkable physical features of the world. It fills a cavity in the midst of a broken chain of mountains, whose height is reduced, at this point, nearly to the level of the sea, and it furnishes not only the means of navigation at a low altitude, but enormous advantages as a safe harbor.

Though the length of transit is greater than in the cases of the other routes proposed, the difficulties in the way are far less. These are disappearing as the work goes on, while the advantages which will be gained by the construction become more apparent, and can searcely be measured. The first is one that will be, and ought to be, shared by the whole civilized world. The establishment of a water way between the Atlantic and the Pacific will realize the dream and hope of Columbus, who, underestimating the circumference of the earth, started on his voyage for the coast of India, and found his way blocked by the newly-discovered continent. Since that time, for nearly four centuries, explorers have hoped to find some open way across the isthmus, or, failing in that, to construct such way by artificial means. Every explorer and advendurer, every king and power, has shared in this hope, and to realize it many hazardous enterprises have been attempted. The government of the United States, in later years, especially since the settlement of California, has felt the deepest interest in accomplishing this latter achievement, has sought by negotiation and by treaties to protect the region from hostile occupation, has joined in several plans to construct canals across the isthmus, and has caused to be made elaborate and careful surveys, both by civil and by military engineers, with a view to the selection of the best route. Other nations have been equally interested, but not so active or effective in preparing the way and in selecting the location. The success of the Suez Canal led M. de Lesseps, who was the chief agent in the construction of that work, to seek to complete the channel of navigation around the world by a water way at Panama. The scheme contemplated the digging of a canal from sea to sea, partly at the level of tide water and partly below it. The work, thus far, has been a failure, and the plan is believed to be impracticable. The Nicaragua route, though burdened with the delays of lockage, is now conceded to be more practical, far less costly, and more useful, than the one at Panama, and will accomplish the same object.

The second great advantage to be derived from the construction of this canal, is the extension of our coast line through it to our western States and to neighboring countries. Vessels sailing from New York to San Francisco are now compelled to pass

around Cape Horn, a distance of 19,000 miles. The benefits to be derived from this extension can scarcely be measured. The enormous quantities of wheat, lumber, and other articles produced on the Pacific coast can now be transported to the Atlantic States only by 3,000 miles of railway or by the long voyage around South America, so that the entire value of these productions is often consumed in the expense of the journey. It is believed that our coasting trade would be increased many fold by the use of the canal through Nicaragua, and that by it employment would be given to vessels at seasons of the year when they are now laid up in northern ports.

Another benefit to be derived by the United States from the construction of this canal is that it will give our people a community of interests with the western coasts of Mexico and South America, now substantially closed to our commerce. commerce of these coasts, being compelled to go around Cape Horn, can from that point reach with less difficulty the markets of Europe than the markets of our own country; while, if the canal be constructed, there will be a safe, well-protected water route between the western ports of the American continent and our chief commercial cities. The canal will, for the first time, make possible an enforcement of the Monroe Doctrine, hitherto a mere dogma in American policy. The communion of interests between the American states will be enormously strengthened by this work. The South American republics are patterned after ours; there can be no clashing of interests between us. For many years they are not likely to be manufacturing countries, but will be devoted mainly to agriculture and mining. They would naturally exchange their gold, silver, sugar, coffee, tropical fruits, guano, and other sources of wealth for the manufactures and productions of the United States.

The construction of this canal would seem, judging by statistics, to be a very profitable investment for American capital. The rapid accumulation of wealth in our country has removed us from among the nations that, by their means, are limited to home enterprises. Assuming that the estimate of tonnage is not excessive, and that the cost of the improvement will not exceed \$100,000,000, the smallest rate of tolls proposed by any one will

yield at least five per cent. on the investment, as well as secure to our citizens, from their proximity to the work, great advantages of trade and profit over foreign competitors.

I will not enter into details as to the nature of the work, or as to the further benefits to be derived from its construction. The question remains, How shall it be executed? And this question must be solved, not in such a way as to advance the interests of private citizens or companies, but as to benefit all the people of the United States. It is proper for me to emphasize the fact that the Maritime Canal Company, and the Construction Company organized by it, have made no application to Congress for aid. The Maritime Canal Company can, no doubt, by making great sacrifices of its stock and bonds, secure the completion of the canal; but all experience shows that this will involve an output of stock and bonds that will be a permanent charge and burden upon the commerce that passes through the canal. The Senate Committee on Foreign Relations has examined the officers of the Maritime Company as to their plans for raising money, which appear to be substantially the same as those adopted for other works of improvement constructed by private corporations. As no income or profit can be derived from the work until its completion, and until the actual passage of vessels through the entire length of the canal, the company, without aid from the government, would be obliged to rely upon its credit or upon its own resources; and, under the most favorable circumstances, it is shown that the burden of liabilities upon the completed work would be not less than \$250,000,000, and might extend to \$400,-000,000, most of the amount borrowed at a high rate of interest accompanied by large discounts. The stock and bonds would have to be disposed of in the open market, and would be sold largely in Europe. Therefore, though the work would have been instituted and conducted by American citizens, the control and management of the corporation would necessarily drift into the hands of holders who would have no regard to the important American interests involved in the enterprise. On the other hand, it is apparent that if the United States should aid the work by their credit, the Maritime Company would be able to complete it at the estimated cost without discount or loss; and

that, in consideration for this aid, the United States could prescribe such terms and conditions as would carry out the object of the concessions and the fixed policy of this government. Vessels of the United States will, in all probability, carry the chief commerce through the canal, and it is for the interest of our people that the charges on these vessels shall be so low as to induce the largest possible number of their owners to avail themselves of the benefits of the canal.

The question, then, before those who were drafting a bill to secure government aid, was in what way this aid should be rendered without involving a departure from our established policy as stated by Mr. Cleveland, and without pecuniary loss or entangling alliances. The only method that was suggested was the one adopted by other nations under like circumstances, and especially by Great Britain in respect to the Suez Canal, namely, that the government should, in consideration of its guarantee, secure such a control of the majority of the stock as to enable it to protect the interests of the people, and such control of the expenditures on the work as certainly to limit the obligations of the company to the actual cost of the canal in money. These primary objects have been, it is thought, secured in the bill now pending, by an unconditional guarantee of payment of the principal and interest of the bonds of the company; by the application of the proceeds of these bonds, under the direction of United States engineers, to the work actually done; and by the transfer of \$70,000,000 out of \$100,000,000 in stock to the United States, with the power to vote at any meeting of the company and with a proper representation on the board of directors. These, and other provisions of the bill reported, will, it is confidently believed, not only secure the completion of the work at cost, but will place it in the power of the United States to protect their citizens in the full rights conceded by Nicaragua and Costa Rica, and will prevent the management of the work from falling into the hands of men who are indifferent or hostile to American interests in that portion of the world.

These objects being secured, the question arose as to what arrangement should be made with the American citizens who had, when the United States declined to construct the work, ob-

tained concessions, and who had actually entered upon its construction. The act of their incorporation provided that it might be altered, amended, or changed, at the pleasure of the United States; but the exercise of this power without regard to the interests of the incorporators, and without neglect or forfeiture on their part, would have been a breach of the public faith. The only result would have been that the government would have been compelled to undertake the work itself, or, by declining to do so, would have maintained the dog-in-the-manger policy of refusing to execute, or to allow any other power to execute, a work of conceded importance to all the nations of the world. At the same time the public naturally objects to the use of the credit or the money of the United States to advance the personal interests and profit of individuals. It was therefore provided that the promoters of the Nicaragua Canal should be reimbursed only for the actual cost to them of the work already done, and that this cost should be ascertained by proper officers of the government and paid in the bonds of the Maritime Company guaranteed by the United States. In addition, it was provided that the promoters should have such reasonable allotment of the stock that they already own by virtue of the concession granted to them, as would be a just and fair compensation for their vested rights and for their services. By the terms of the contract entered into by the Maritime Company with the Construction Company, the latter is entitled to \$12,000,000 in stock, in consideration for the concessions and privileges granted by Nicaragua and Costa Rica, which were transferred by the Construction Company to the Maritime Company. It was deemed, after careful consideration, that, as this stock has not yet been earned, the Maritime Company should be allowed to issue to the Construction Company stock of the former company to the value of \$3,000,000, upon condition that all other stock of the Maritime Company, of every kind, name, and nature, issued or agreed to be issued, should be surrendered and canceled, except \$6,000,000 stipulated to be given to Nicaragua for its concessions, and \$1,500,000 to be given to Costa Rica. The value of this stock at first would be nominal, and its future value would depend entirely upon the value of the completed work. This proviso

is regarded by the Maritime and Construction Companies as harsh and illiberal, yet they have agreed to it, as well as to the other terms and conditions proposed in the pending bill.

The more I reflect upon the transcendent importance of the work proposed, upon the international difficulties which formerly surrounded the subject, upon the objections of a large portion of our citizens to the direct construction of the work by the United States according to the plan proposed by the treaty, and upon the just claims of the American promoters of this enterprise who have been engaged in it, the more I am convinced that the aid to be given by the United States, if the bill should become a law, would be a wise act of public policy, second in importance to no other in the history of our country, and of general benefit in promoting our commerce and industry in every section. No doubt the cities along the Gulf of Mexico and the southern Atlantic coast will first feel the beneficial effect of this improvement, but it will extend to the people of every State, by the increase of their commerce and productions.

To reject or to neglect the opportunity now offered would leave this enterprise to the chances of failure, or transfer its control to commercial rivals whose interests and fixed policy would lead them to convert a great highway of nations into a dependency more formidable than Gibraltar and more troublesome than Canada. A commercial company in India has been converted into a vast empire; the single port of Hong Kong is made to dominate a great population in China; the control of the Suez Canal and of Egypt has been purchased in the stock market—these are sufficient warnings to the American people to avail themselves of the opportunity now open to them to protect their coastwise trade, and at the same time, with little cost and no risk, to contribute to the world one of the greatest achievements of mind over matter that has ever been undertaken.

JOHN SHERMAN.

#### SILVER AS A CIRCULATING MEDIUM.

THE country is misled, to some extent, by the claim that our currency is upon a gold basis. It is only partially so. The part played by gold in financial affairs is important, but it is subordinate. Gold certificates circulate as currency, and, together with gold coin, constitute a portion of the reserve in the national banks. Thus gold adds to the volume of currency, and for the purposes of business it is quite immaterial whether or not the metal itself is in circulation. In point of economy and convenience, the currency of a country should always be of paper. For this there are many reasons. The abrasion of metals by use is a very considerable item of loss, and this is true especially of gold. A hundred thousand gold dollars cannot be transferred, coin by coin, from one receptacle to another, without an appreciable loss. Small coins of silver show the results of use after a few years. Again, the inexpert public are more easily deceived by false coins than by counterfeit notes, and spurious coins are more easily produced than spurious notes. A million dollars in silver weigh about 30 tons, and a like value in gold weighs about one sixteenth as much. The substitution of subsidiary silver coins for fractional paper currency imposed a loss upon the government, in the cost of production, of not less than \$350,000.

These facts warrant the conclusion that the use of coin, whether of gold or of silver, is both inconvenient and expensive. The continuous use of paper can be secured only by the presence of confidence on the part of the users. That confidence can be maintained only by the promise of a party supposed to be responsible, and that promise must be sustained by the possession of a quantity of coin by the debtor party quite equal to any demand that can be made by the holders of the promises. This condition is fulfilled by our gold and silver certificates, each one of which represents an equivalent of gold or silver coin in the treasury of the United States. There is, therefore, as much rea-

son for confidence as can be found in any currency scheme that has ever been devised. Under this system a man who deposits gold and receives a gold certificate can command gold at any time, and a man who deposits silver and receives a silver certificate can obtain silver whenever he may choose to ask for it.

The difficulty which the country is called upon to meet is not a result of this system, but of the fact that the extraordinary production of silver has worked a reduction of its value in comparison with gold. In 1860 silver was more valuable than gold, measured in conformity to the legal ratio existing in the United States. On that basis the silver in a silver dollar would purchase the gold in a gold dollar and leave a remainder of four cents. That condition was due to the extraordinary returns from the gold placer mines of California. Coincident with the exhaustion of the placers came the invention of the power drill, by Charles Burleigh, and the more practical use of dynamite as an agent for blasting rocks. In the last 20 years, and more especially in the last 10 years, a most wonderful progress has been made in processes for the economical use of coal and in devices for the reduction of metallic ores. Since about the year 1870 the production of silver has been in excess of the production of gold, as compared with the demand for each metal as coin and in the arts. Nor should the fact be overlooked that the demand of the arts must be first met, as the workers have always the ability to use coin if the supply of bullion should be inadequate. As wealth increases, the demand of the arts for the more precious metal increases in a corresponding ratio. perience of recent years seems to justify the opinion that the earth's treasure of gold is less, relatively, than its treasure of silver, and that the movement of events, under the inexorable laws of supply and demand, tends toward the greater use of silver as currency, or as the basis of currency, and toward the less frequent use of gold.

For 14 years this process has been going on, until in the United States the circulation of gold does not much exceed \$130,000,000, while the circulation of silver is not less than \$310,000,000. For the last 12 or 15 years it would not have been practicable to limit the currency of the country to gold and to

paper if there had not been a considerable and yearly-increasing issue of United States notes. During the last 12 years the annual product of the gold mines of the United States has averaged about \$35,000,000. Of this sum not less than \$10,000,000 has been used in the arts. It is manifest that an annual increase of \$25,000,000 in the volume of the circulation would have been quite inadequate, and hence it is now manifest that the country was compelled either to legalize the use of silver or to authorize an annual addition to the volume of greenbacks. As to the future, it may be predicted, with a reasonable degree of certainty, that silver is to be the chief factor of the currency of this country and of this continent; unless there should be a large increase in the gold product, and if we reason from known facts, there is no ground on which to predict such an increase. In the last 10 years the annual product of gold has neither risen above \$36,000,000 nor fallen below \$32,000,000. Without now canvassing the wisdom of particular measures, the experience of these 10 years justifies the use of silver as the most available, most valuable, and least dangerous means of reinforcing the currency of the country. The important questions remaining are these: To what extent and by what measures shall the use of silver be continued? By what means shall England and Germany be induced or compelled to authorize the use of silver, and through an international agreement to aid in determining its value, relative to gold, for all the purposes of domestic and foreign trade? Not more than 30 years ago it would have been thought a supreme achievement in finance to secure a paper currency based upon an equal deposit of either gold or silver in the treasury of the United States; but now that we are approaching a condition when such a deposit of silver seems inevitable, the public mind is disturbed by conjectures, theories, and apprehensions as to the consequences. These apprehensions of evil may never be realized; but most assuredly they are suggested, naturally, by the existing condition of affairs.

A history of the stages by which the country has reached the present condition requires some reference to my official opinions and doings in the treasury and in the Senate of the United States. In December, 1872, silver had depreciated about seven

per cent. from its value relative to gold in the year 1860; that is to say, a gold dollar would then purchase the silver contained in a silver dollar and leave a margin of something more than three cents. The prospect was that the depreciation would continue for many years. In my report to Congress in December, 1872, I made the following statement:

"In the last 10 years the commercial value of silver has depreciated about three per cent. as compared with gold, and its use as a currency has been discontinued by Germany and some other countries. The financial condition of the United States has prevented the use of silver as currency for more than 10 years, and I am of opinion that upon grounds of public policy no attempt should be made to introduce it, but that the coinage should be limited to commercial purposes, and designed exclusively for commercial uses with other nations. The intrinsic value of a metallic currency should correspond to its commercial value, or metal should be used only for the coinage of tokens redeemable by the government at their nominal value. As the depreciation of silver is likely to continue, it is impossible to issue coin redeemable in gold without ultimate loss to the government; for when the difference becomes considerable, holders will present the silver for redemption and leave it in the hands of the government, to be disposed of subsequently at a loss. If the policy should be adopted of issuing irredeemable silver coin whose intrinsic and nominal values should correspond to those of gold, the time would come when the country would suffer from the presence of a depreciated silver currency not redeemable by the government or current in the channels of trade."

If we accept the fact that our silver coins are not current in the channels of trade outside of the United States, all that was thus predicted in 1872 has been verified by the experience of subsequent years. In accordance with these views, Congress passed the act of February 12, 1873. By this act the use of silver was limited to the subsidiary coins and to the trade dollar of 420 grains, to which the legal-tender quality was denied for payments above five dollars. The new dollar was designed for the India and China trade. This result was so far attained that for many years there was a large coinage of the trade dollar for foreign markets, and in limited quantities it circulated in the United States. The act of February, 1873, was known as "the act for demonetizing silver," and in Congress and before the people the charge has been made that it was passed secretly or surreptitiously. The charge has no foundation whatever. From the first days of December, through a period of more than two

months, my recommendation and the current proceedings of Congress were before the country.

The financial troubles of 1873, and the relative decrease in the production of gold as compared with the production of silver, when considered in reference to the demand for gold in the leading countries of Europe, gave to the advocates of silver an immense advantage in Congress and before the country. The several reports made by the various members of the Silver Commission of 1876 justified the conclusion that the time had come when the exclusive use of gold should be abandoned. In this conclusion, as a member of the Commission, I concurred, subject, however, to the condition that an effort should be made to secure the co-operation of European countries, and especially of England and Germany, before any authority should be given for the coinage of silver in the United States. This view was not accepted, and in February, 1878, an act was passed over the veto of President Hayes, authorizing the coinage of silver dollars and making them legal tender. The same act made provision for a conference of nations for the purpose of agreeing upon the use of both gold and silver upon an arbitrary ratio of value.

By the act of 1878 the secretary of the treasury was required to purchase and coin \$2,000,000 worth of bullion each month, and authority was given to him to purchase \$2,000,000 in addition, whenever, in his opinion, the public interest should require such purchase. This statute closed the controversy for all practical purposes. The wisdom of the measure is open to debate; but the country then entered upon a policy from which there can be no departure, except by a wrenching of our financial system so serious that its consequences would be felt by the commercial world. When the act was passed the currency of the country was upon a gold basis. Its passage was in accordance with the report of the majority of the Silver Commission created under a resolution of the houses of Congress, August 15, 1876. I may be allowed the additional personality of saying that I did not concur in that report. On the contrary, speaking for myself only, I then said that the introduction of silver as a currency ought to be postponed until an effort to secure the co-operation of other countries should be faithfully made, and that the remonetization of silver by

the United States would be "followed by such a depreciation in its value as to furnish a reason against the adoption of the plan by the rest of the world." These views were in harmony with the policy that I had advocated in my report of 1872. In that year, and thenceforward until 1876, the country was upon a gold basis, and I thought it wise to rest upon that basis in the hope that England would soon realize that the output of gold was inadequate to meet the demands of the commercial world.

By the act of 1878 the remonetization of silver was authorized, and a conference of the nations was invited. As might have been anticipated, England and Germany, under the influence of a well-founded opinion that in time they would be able to monopolize the free gold of the world, avoided any conclusion favorable to the policy of the United States. Thus it happens that the governments of England and Germany are engaged in a struggle, not free from serious difficulties, to place and to keep the business of those countries upon a gold basis, while our government is engaged in a futile attempt to maintain its silver coins and its gold coins at an equality of commercial value. While I adhere to the opinion that we committed an error, which may result in serious and far-reaching evils, in not inviting and securing a conference in advance, when our position as a gold-using and a gold-producing country was a menace to England and Germany, I cannot but admit that the use of silver has been an efficient agent in securing the degree of prosperity which the country has enjoyed during the last 10 years. The use of silver has rendered the withdrawal of a large volume of national-bank notes a comparatively harmless proceeding; but had the country been upon a gold basis exclusively, the stringency would have been such as to force an additional issue of United States notes.

At this point I venture the statement that the annual output of gold—in excess of the demand in the arts, which must be first met either by the use of bullion or by the use of coin—would be wholly inadequate to meet the necessities of England, Germany, and the United States, if the use of silver should be limited to subsidiary coins; and that this is so even if we take no notice of the requirements of other parts of the commercial world. On this view of affairs rest the alternative statements that either all com-

mercial nations must use both gold and silver upon an agreed ratio of relative value, or some nations may use gold exclusively, while other nations must accept silver altogether or as the chief part of their currency. Voluntarily, and for the time being at least, we have placed ourselves in the latter class, and for the time being there are no visible and feasible means of changing our condition. The coinage of silver, under the statute of 1878 and its amendments, amounted, on January 1, 1891, to \$376,000,000, and the thought of demonetizing silver and withdrawing this vast sum of coin from use cannot for a moment be entertained by any one.

The remaining question is this: In what manner can the use of silver be continued with the fewest and least serious evils to the country? Incident to this inquiry are two alternative propositions: Shall the use of silver, either in coin or in bullion, as the basis of silver certificates, be limited to the production of the United States, or shall we tender our market for the product of the entire world? The latter course might, and probably would, stimulate the production of silver in countries where the mines are richer than those of the United States, where labor is less expensive, and where, without much delay, the most effective processes and the most advanced inventions would be adopted. Can the miners of the United States be subjected safely to this competition? The value of this inquiry may be estimated by the facts that in 1878 the silver mines of the United States yielded 47 per cent. of the entire product of the world, while in 1890 the yield was a trifle less than 40 per cent. From 1887 to 1889 the increase for the world was \$37,000,000, and of this increase only \$11,000,000 came from the mines of the United States. view of these facts, and of the reputed wealth of the mines of Mexico and South America, it is not unreasonable to apprehend that the destruction of the silver-mining interest in the United States would follow if the coinage of silver should be opened to the product of the world. Moreover, there is a large amount of silver coin and bullion in Europe which the holders would gladly exchange for gold, even at some loss in nominal value.

With the balance of trade in favor of the United States, it will not be easy for foreign banks and bankers to obtain American gold in large quantities, though there are possible devices

by which inroads upon our product might be made. If, however, the balance of trade should be against us, the depletion of our stock of gold would go on with great rapidity. As gold is now a part of our currency, and the better part of our currency, we ought to retain as large an amount as possible in our hands; and as silver is the less valuable of the two metals, we should do whatever is in our power to extend its use in other countries. As the coinage of any considerable additional quantity of silver is a useless expense, it seems wiser to continue the purchase of silver bullion, the product of the United States, upon the present basis substantially. The silver dollar of the mint is a depreciated dollar when compared with the gold dollar, which is the standard in international transactions; and it seems unwise to transfer to the general public the power to issue these dollars with such limit only as may be fixed by the uncertain product of the mines. Possibly the country would be subjected to troubles and losses of no inconsiderable magnitude, in case the production of silver should increase, and the gold countries should be able to adhere to the single standard. In any view of the case, the evils of a depreciated standard of values must fall upon all classes, and that fact may with justice sustain the position that the profits of coinage should inure to the country rather than to a class.

The refusal of the states of Europe to co-operate with the United States in the use of both metals upon an agreed ratio of value, may produce disasters in all the countries, but it is not improbable that the consequences will be more serious in England and in Germany than in the United States. In the United States the volume of currency will be increasing constantly, and with the additions to the volume there will be an enlargement of business and an increase of activity in business pursuits. This condition of affairs, so prosperous apparently, will be followed by a panic due to some untoward event in business, by a general loss of confidence, by a hoarding of means by the creditor class, and by distress and bankruptcy in the debtor class.

Neither the statistics of a single country, nor a comparison of the statistics of many countries, furnishes a guide to a safe opinion as to the volume of currency which a given number of people can wisely and profitably use at any given period of time. Omitting all reference to possible ultimate consequences, it may be assumed of a nation in which the volume of currency is increasing that there will be activity in business and an aspect of general prosperity. On the other hand, there will be depression, discontent, and finally bankruptcy, more or less universal, in a country in which, through a continuing series of years, the volume of currency decreases in proportion to population and to the demands of business.

The present yield of gold, after deducting the bullion required in the arts, cannot furnish more than \$80,000,000 a year to the gold coinage of the world, and of this amount not more than \$40,000,000 can be appropriated by Great Britain and Germany. This slight addition may not keep pace with the demands of business and of an increasing population, and thus those countries may be subjected to a constant financial pressure which will compel them to accept the bimetallic system and thereby bring to a close a controversy and a rivalry which are fraught with peril to the industries and business of both continents.

GEORGE S. BOUTWELL.

### DO WE HATE ENGLAND?

LET us thank God that the art of war is tending to suicide. Its cost has become a sting in the tail, which menaces head and front. A hundred years ago, when a war could be carried on for years at the expense of less life and treasure than must now be wasted in a single campaign, Edmund Burke impeached what he called "wars of calculation," as worse than absurdities, even apart from moral considerations. "On balancing the account of such wars, ten thousand hogsheads of sugar are purchased at ten thousand times their price." This is just as true of fish quintals and seal skins. He continues:

"Speculative plunder, contingent spoil—these will never support a mercenary war. The blood of man should never be shed but to redeem the blood of man. It is well shed for our family, for our friends, for our God, for our country, for our kind. The rest is vanity, the rest is crime."

Compare these noble utterances with the flippancy of our journalism, and with our political bravado about Alaska and Newfoundland. Have we learned nothing from the terrible destructiveness of our civil war, its awful bloodshed, its intolerable bounties and taxation, entailing upon another generation the enormity of the pension bill? Other great powers, and those the most warlike, are fulfilling the prophecy, in part, that "nations shall learn war no more." Doubtless the partition of Africa has been undertaken in a mercenary spirit, and makes possible future "wars of calculation"; but, for the moment, the high competing parties have paused at the threshold of such a future, and, deliberately counting the cost, have given a lesson to the world. Of this gigantic scramble for a continent and its pacific adjustment, M. de Laveleye says \*:

"The way in which the European states have divided Africa between them is not less worthy of attention than the facts we have already noticed. . . . Diplomatists have taken the place of generals and admirals, and the pen has been substituted for the sword."

<sup>\*</sup> The Forum, January, 1891, p. 489.

One breathes more freely as he reads this. But is Othello's occupation gone? Is diplomacy equal to other crises of the times? Is there sanity enough in cabinets and congresses to repress the madness of politicians; to confront the strain and the commercial rivalries of the epoch, of this universal greed for booty and clutch for territory? Can the pen, with nothing but law and common sense flowing from its point, prevent the profligate waste of human life and blood, and reduce armies and navies to the insignificant scale of a police, armed only against piracy on the seas and anarchy on shore?

For four hundred years diplomacy has preferred to fan the sparks of war into conflagration, rather than to extinguish them. From the times of Machiavelli to those of Talleyrand, diplomatists have been excused from keeping a conscience, under the maxims of the great Florentine, which have been accepted in civil matters as well as in war affairs. But what was philosophy in him has come down to the grosser instincts of the masses in our day, in their practical proverb, "All is fair in politics." In our own Republic the purification of politics has been derided as an "iridescent dream," which is the same thing as to pronounce the putrefaction of public morals an immedicable ulcer. Nor can England afford to cry shame on us. In her Parliament, side by side with those who still uphold its ennobling traditions, sits a class of men not a whit superior to those who have brutalized and subjugated the municipality of New York. I have seen lawgivers who write "M.P." after their names scuffling with the police and howling with the rabble in Trafalgar Square. While we must take account of such elements as these in forming our hopes for the future of England and America, we may yet indulge the trust, I humbly conceive, that what has prevailed with the governments of Europe so practically for the peaceful solution of African problems, may prove not less practical with us. It may be a good thing for the future, that just now a veil is lifted from the secret history of the past by the appearance of the private memoirs of M. Talleyrand—that Proteus of diplomacy, that enigma of his own day, and that lesson of warning to our own. Perhaps to him, more than to any other civilian, we owe the outcome of an epoch that extinguished the Bourbons and brought down to the dust the anomalous fabric that had stood for a thousand years under the fictitious label of "The Holy Roman Empire." So perish other fictions that invite alike the anathema of Daniel the prophet, and the scorn of the cynical Byron:

"Those pagod things of sabre sway, With fronts of brass and feet of clay."

The confessions of Talleyrand may teach the publicists of our day to discard forever the Machiavellianism of which his melancholy career is an unparalleled example. Then, indeed, the pen of a great secretary may spike a Kaiser's cannon, and outweigh the sword of Brennus. But this cannot be until quibbling and chicanery shall be held as contemptible in the protocols of cabinet ministers as in the pleadings of "Quirk, Gammon, and Snap," and other pettifoggers of the Old Bailey.

Why should all that discredits a dealer in the traffic of the market be considered creditable in the sharp practice of a diplomatist? It is refreshing to be told, in response to such inquiries, that diplomacy is purifying itself, as it were. In the recent division of spoils between those great powers which have partitioned Africa from the Cameroons to Zanzibar, we are reminded of the proverb that honor exists among thieves. Says M. de Laveleye:

"Germany was . . . clearly encroaching in a very decided manner on territory apparently reserved to England. But the question arose whether it was worth while to quarrel over a few strips of land in the dark continent, and whether the friendship of the great military power was not well worth some small sacrifices on the part of the English government. After prolonged discussion an understanding was arrived at, which took the form of a mere exchange of letters, not of a treaty."

Note this memorable information—that even treaties are as needless as red tape, if only diplomatic correspondence may be reduced to the fair dealing which binds honorable men in what they write and sign with their hands. "This is now the formula," continues M. de Laveleye, "employed for arrangements of this description"; and most important is his intimation, that thus "new principles of international law" have been introduced into the diplomacy of Europe. "Hail, holy light!"

What followed? England hauled down the meteor flag,

which for nearly a century has been her counterpart of Gibraltar in the German Ocean; her proud reminder to the Baltic ports of "Nelson and the North, and that glorious day's renown." Thus even haughty England could purchase peace, without loss of honor, by acting on the maxims of her own Burke, against every dictate of pride and passion. Talleyrand never imagined such a moral advance in the art of pacification. But why should not we be as ready to count the cost of a mercenary war about codfish and seals—the cost in floods of human blood, and in perpetuated feuds between kindred peoples? With the new principles introduced into diplomacy by such examples, is it possible that ignoble counsels should prevail with the English or with us, at the sacrifice of those relations which every consideration of interest, and of future alliances the most desirable for both powers, call upon both powers to cultivate now and to make cordial forever? Statesmanship is bankrupt indeed, if it does not acknowledge, as a recognized law of diplomacy for these two nations, that they possess motives for such alliances preponderating over any irritating difficulties of the moment that may arise—motives such as were never before enjoyed by two great contemporary powers; such as are envied by all the other governments of the civilized world; such as they would gladly see us throw to the winds. If we should forfeit the advantages that they offer, we should be a laughing stock in all the cabinets that now influence the destinies of mankind.

Compare with such considerations of far-reaching forethought, with such common-sense ideas of timely concession and honorable compromise, the flippancy of the suggestion, worthy only of schoolboys, that we must first draw blood, and have a wrestling match on field and wave. To compromise and concession we must come at last. When thousands of brave men fester under the soil, or lie in the fathomless depths of the sea, lo! then we must come down to humiliating terms of peace, perhaps equally discreditable to both powers, as the price of a puerile curiosity to see which is the best boxer without gloves. We need not sigh because "the age of chivalry is gone"; for with it have passed away innumerable follies, and after them should vanish this puppy passion for jousts and passages at arms.

Honor still survives; and by honor must not be understood a thing of naught to which duelists appeal, but rather the high spirit that embodies all that was best in chivalry. It includes the deference paid by chivalry to the weaker sex, and also a refinement of feeling, allied to reverence for woman—the generous instinct that abhors a bully. On this genuine spirit we may still rely, for it is what Burke meant when he eulogized, as "the cheap defense of nations," this "unbought grace of life, the nurse of manly sentiment and heroic enterprise, the spirit of an exalted freedom." That such a spirit is extinct in either of the great families of the marvelous race called "Anglo-Saxon," I cannot by any means admit.

My primary duty is to my own nationality, and in nothing that I have said do I mean to assume that we are in the wrong in questions that now agitate Downing Street not less than the White House. But if there is bad blood in their mutual assurances of "high consideration," I must confess the unpleasant fact that, while it is engendered by nothing that is American, it comes of the common degeneracy, in both countries, of those who now shape legislation. We suffer alike from an apple of discord tossed into our social elements by the rivalry of politicians; nothing less than this inveterate Hibernian scandal, with which, in itself considered, we Americans have no concern. English publicists have too readily permitted themselves to imagine that "Americans hate England." Superficially, and as regards such quarrels as brothers often keep up, so long as no supreme interest of the family brings out the deeper and more real instinct of unity, this may be true. As the older and less sensitive nation, England ought not to allow such an idea to become practical. The great peril of popular government, which often elevates the passions of the moment into the policy of a state, is far more constitutional with us than with a government still balanced and checked by established traditions and by the predominant authority of usage and precedent. Why should the older and better-disciplined government permit such an idea to crop out in irritating reproaches, begetting reciprocal hate?

Not long after the close of our civil war, I was the guest of an eminent Englishman, in an old baronial hall which had been

the scene of great historic events. He invited me, one evening, to turn aside from the company for a little talk about that war, to gratify his curiosity as to my own views of it and of the share of England in its complications. I answered his inquiries not as a northerner, but as an American, able to do justice to the South, while maintaining my own convictions that the Confederacy was wrong and that England's sympathy and succor were In fact, the conduct of England was a blunder, worse than a fault; because it sacrificed a golden opportunity of teaching us the truth for which I am contending, that neither in our internal discords nor in possible wars with other nations can it ever be justifiable, on either side, to destroy the bonds of perpetual peace between the kindred peoples. "But, ah!" said my friend, "you have yourselves to blame for that blunder, or if you will—that crime; at least you must blame Mr. Seward. He told the world, from his cabinet place, that the quarrel was an affair of forty days, and had nothing to do with slavery. This was the inspiration of all we did to exasperate the North, in giving aid and comfort to the weaker party." How I tried to answer this is of no importance. With great generosity my noble opponent ended the conference with a confession that his views were greatly modified; and, "I thank God," he said, with fervor, "that all was ended as we now see to be for the best."

I introduce this digression only to make a rejoinder, in a like spirit, for our impolitic, and, as I suppose, unjustifiable conduct, in sending sympathy and a money tribute to the Parnell faction. I must adopt his formula and return it thus: If our conduct has been criminal and a blunder as well, which I do not care to affirm or deny, you must thank yourselves for it; or at least you must thank Mr. Gladstone. Did not "the grand old man" induce us to credit a thousand fables about the wrongs of Ireland? Is he not responsible for all the delusive eloquence which our partisan politicians retail at second hand? Do not thousands of Englishmen of the educated classes follow his lead, pulling the houses over their own heads to establish "home rule" in Kilkenny? Is it not true that, only a few months ago, had events hurried up a general election, Englishmen would have returned an overwhelming majority to ministerial benches, under

Mr. Gladstone as first lord of the treasury? Do all these Englishmen "hate England"? Mr. Lecky has recently turned light upon some of these matters, which may lead sober Americans to answer that, practically, such Englishmen do hate England; for they have deserted the flag of the empire and hoisted the green above the red, as the banner of party. But, if the influence of Mr. Gladstone has so prevailed over the sober sense of a majority of Englishmen, are not Americans far more excusable for their delusive sentimentality in behalf of the weaker party? I think they are; but, in point of fact, there is nothing American in the phenomenon. Over and over again have I heard Americans, of both political parties, declaiming, in their table talk, over the astonishing degeneracy of English politics, and lamenting the inexplicable inconsistencies of "the grand old man." In fact, our political condition here reflects the conditions there. "The Irish question" is the war cry of conflict between parties nearly equal on both sides of the Atlantic. In England itself one party stakes everything upon its professed championship of Ireland; the other tosses even its children to the wolves, in efforts to escape from a dilemma, and to make headway, with like expedients for retaining power. It is just so with us. The Irish, indeed, do not disguise their "immortal hate and study of revenge." In this they have no American sympathizers worthy of mention; but politicians will make the reverse appear to be true so long as a few thousands of Irish votes may turn any election this way or that. Few observe that if this be more than temporarily so, our system of popular government exists no longer. Both parties are equally at the mercy of aliens. no more government "by the people and for the people." The people are robbed of their birthright by the baseness of political leaders who buy this mercenary vote at the sacrifice of all that is dearest to Americans, making "Irish politics," instead of our own affairs, the predominant and ruling interest of the hour.

I do not see, I am sorry to say, that politics in England are more healthy or cleaner than our own. What I do see that is very hopeful among us, is, 1, that the Irish vote is losing its importance in the political market, as other foreigners begin to outweigh it by a more prompt adoption of American ideas; 2,

that the Irish of the third generation are not so easily cudgeled by hedge priests out of their political rights, especially if they have gained a little information in the common schools; and, 3, better yet, that the ultramontane hierarchy, in their wars upon American institutions, in their impudent assertion of the papal supremacy over civil as well as temporal matters, and in their offensive pose as "sovereign princes" (words used by the envoy Satolli, to describe the position of papal bishops in America), are creating a breach with their more intelligent laity, which these are growing bold enough to avow. In another decade we may hope to see the old national spirit revived and predominant. Woe to the caitiffs who now block the way to such a revival, for no American can long endure the subjugated condition and degradation of the great municipality of New York. The financial center of the Republic cannot long be insensible to its threatened loss of credit in the markets of the world; for it is becoming known that ruffians may be found in its magistracy, that ignorant tapsters may be judges in its courts, and that packed juries of aliens may render verdicts there that shake the affairs of moneyed corporations.

I write, indeed, as an American of the old colonial stock that vanguard of civilization in the new world. As such, I was reared under influences which assured me that love of my own country was not likely to be made less sincere by the study of its history, and by comparing what we are with what would have been had the French who settled Canada, or others of the Latin race who established themselves in Mexico and South America, been permitted to forestall, or to supplant, the enterprise of our forefathers. So grew up my love and gratitude for the mighty race of which Alfred was in some sense the founder, and which produced in our Washington a scion from the same root, enriched with the accumulations of well-nigh a thousand years. Every day I see proofs, in the growth of our literature, of a reverent turning to the sources of all that enables us to become in time a people soberly great, and mighty to assimilate and to subordinate all that now seems an adverse element. One does not love his parents less for remembering that they also had a parentage, and that it was such as no man should disclaim.

How forcibly this was brought to my mind, not long ago, in Westminster Abbey, where, amid its thronging aisles, a procession of church fathers moved slowly up its nave, as great in number as some of the ancient councils of undivided Christendom, but gathered from a geographical universe of which it never dreamed. From our own United States and British America, from both the Indies, from islands under the Southern Cross, from China and Japan—men from the whole round world were there, powerfully impressing the reflecting mind with a sense of what is meant by the world-wide propagation of Anglo-Saxon families and by the universality of the English language. Do Americans remember that this same Abbey, which is the sepulcher of ancient England and of so many of the most worthy of its more recent progeny, was, in some sense, the cradle of American colonization? In those prebendal stalls, in the days of Queen Bess, sat Richard Hakluyt, in his heart and in his prayers presaging all that it was given me to see with mine eyes and to hear with mine ears as there fulfilled. "I do remember," says he, "that, being a youth and one of her Majesty's scholars of that fruitful nursery [Westminster School], it was my hap to visit my cousin, a gentleman of the Middle Temple, at a time when I found, lying upon his board, certain books of cosmography and an universal map." Thus writes the holy Hakluyt, and in an eloquent passage he describes his boyish wonder at the new-discovered lands beyond sea, to which his kindly kinsman directed his attention, predicting that all these lands must one day be filled with the knowledge of the Lord. "Which things of high and rare delight to my young nature took in me so deep an impression," he adds, "that I constantly resolved, by God's assistance, to prosecute that knowledge and kind of literature the doors whereof were so happily opened before me." So indeed he did, never ceasing to stimulate Raleigh and others to the enterprise which established religion and learning at Jamestown, and which, yet earlier, enabled Spenser to salute Elizabeth as "Empresse of Virginia."

What impressed me most in that array, however, was the sight of representatives from New Zealand and Australia; the giant progeny of England, so near the Antarctic pole; nations

born in a day and enthroned at the confluence of oceans; havens for ships that will transfer to them the future mastery of the seas, and therewith insure the supremacy, in the world at large, of the tongue of England, its literature, its religion, and the inexhaustible wealth of its laws, constitutions, and law-abiding liberties. Let us reflect upon the worth to us of an alliance with such a universal empire. Is statesmanship so barren that none of our public men can point out to our countrymen and make them feel the moral of all this? Do they not see the madness of forfeiting our share in this incomparable inheritance, by making ourselves aliens in Anglo-Saxondom, as if we were "bastards and not sons"? For one, let me at least speak out for my country and for her share in the work of christianizing and enlightening the human race. Nothing less is dependent on her fidelity to her origin, and to her grandeur among the nations as already the "Greater Britain," if you will—than that she should thus fulfil the prophecy of Berkeley: "Time's noblest offspring is her last."

A. CLEVELAND COXE

## THE SHIBBOLETH OF "THE PEOPLE."

I MET, the other day, a young gentleman from the University of Oxford, distinguished, I was told, as an orator at the Union there, who, after a few minutes' conversation, was so good as to inform me that he believed in "the people's gospel—every man to count for one; no man for more than one." Whereupon, in my haste, perhaps, I privately wrote him down an ass, while professing the interest which politeness demanded in the statement with which he had favored me. Probably it would have been kinder if I had so far presumed upon the privilege of additional years as to recommend to him Dr. Johnson's precept, "Clear your mind of cant." At all events, let my readers bear with me if I beg of them to do this; so that we may, if possible, arrive at some clear and rational conception regarding that very common shibboleth, "The people."

I remember that the late M. Scherer once called this phrase "the great enigma of history." But among the many meanings assigned to it, two only, perhaps, need be mentioned for our present purpose. It may mean a nation, as it does when we speak of the English, the French, or the American people. It may mean a particular section of a nation, the most numerous, the least wealthy, and the least cultivated. When used in this latter sense it very commonly becomes a shibboleth, and an extremely effective one too. Thus was it applied when Mr. Gladstone, after delivering himself of his celebrated rodomontade about "the classes and the masses," was enthusiastically saluted as "The people's William." Thus, too, was it used when one of his humbler adherents, distinguished, if my memory is not at fault, as an apologist for mob violence, was dubbed, by a pleasing alliteration, "The people's Pickersgill." In the same spirit, an old woman, on seeing Robespierre led to execution, exclaimed: "Il aimait bien le peuple, celui-là." A hundred years ago, Grattan insisted that "the populace differs much, and should be

clearly distinguished, from the people." The tendency of political progress, from his time to ours, has been to ignore the difference and to rub out the distinction. Throughout the civilized world the populace is now, to a very great extent, identified with the people. And no wonder, for political power has everywhere gravitated to the populace. The Abbé Siéyès, in that famous pamphlet of his which so largely influenced the course of the French revolution, wrote: "What has the third estate been, till now, in the political order? Nothing. What does it want to be? Something. What is it really? Everything." Oracular words, indeed, and truly presageful of the course of events. What is called democracy, or government by numbers, is an accomplished fact, and universal suffrage is its accepted form. The doctrine which my enthusiastic young friend called "the people's gospel" is, not that this is a kind of polity specially suitable for the age, but that it is the sole legitimate kind of polity, the essential and only right constitution of society, the unique and infallible specific for the healing of the nations.

The people's gospel must on all hands be allowed to possess one merit—it is extremely simple. It is not a doctrine laboriously derived from experience and carefully verified by observation. It is in the strictest sense a priori. It postulates that each individual "citizen" is entitled to an equal share of the national sovereignty; and to the majority of citizens—that is, to the representatives of the majority—it attributes supreme authority, in virtue of an imaginary contract whereby the native independence of each equivalent unit is surrendered for the common good. The popular will, that is, the will of the most numerous portion of the adult males—I put aside, for the present, the question of women's rights—is, in this new evangel, the source and fount of all power. And political science is held to consist in securing for it free expression and unimpeded effect.

Such are the essential tenets of the people's gospel. No doubt they are mainly derived from the teachings of Jean Jacques Rousseau—though modified, of course, by the conditions of the time—however little many of their most fervent preachers may be aware of their origin. It is worthy of remark that Rousseau's political philosophy—reprobated by the great

Liberal Party in England, when it was first promulgated, as subversive of true freedom—inspires the most influential section of that party at the present time. The radicalism of which Mr. John Morley, Mr. Labouchere, and Mr. Bradlaugh are the chief prophets and apostles, is essentially of the Rousseauan type, and is substantially identical with the movement known on the continent of Europe as "the revolution." And now let us consider the people's gospel a little in its theoretical positions and in its practical working.

It is disheartening, in an age which boasts of its enlightenment, to have to point out the untenableness of Rousseau's political doctrine. The fewest possible words must suffice to exhibit the fundamental errors which altogether vitiate it. The unit of Rousseau's speculations is man in a state of nature, that is, in an extra-social state. No such man ever existed, and, had he existed, political rights could not have been predicated of him. These rights presuppose a polity. We may by an effort of the mind abstract the individual from the social organism, and ascribe to him such and such rights. Nay, we must do this, if we would obtain a clear idea of the relations in which rights stand. But we must remember that only in society does the subject or object of rights exist; only in that social fellowship which conciliates might with right and right with might. Again, the true type is not the noble savage of an imaginary past, but the ideal man developed to the utmost by civilization—the man of culture, with his affections, powers, and capacities expanded and disciplined, and with his "large discourse of reason" carried on to the furthest limits. Further, the social contract, which Rousseau made the basis of the public order, is not only a mere fiction, but a direct contradiction of primary verities, historical and philosophical. As individuals exist by nature in and through the family, and as states have arisen by tribal growth, by intermarriage, and in other ways from the family, it is evident that a conscious agreement to found a society never was entered into by individuals hitherto belonging to no society. Man has never lived as a lawless savage. Such an animal would not be man, but something lower. The state is not a conventional institution. There is historical solidarity, there is corporate solidarity, between its members. It is an organism consisting of parts not uniform but diverse, representing various degrees of individuality, fulfilling distinct functions graduated in importance; and all co-operant to the end of the common weal.

But neither Rousseau nor Locke, in whose mechanical philosophy the political ideas of Rousseau are contained and justified, understood the meaning of the word "organism." They conceived of mankind as so many machines, all alike, and of society as an arbitrary or fortuitous concourse of these machines bound together by a contractual tie of self-interest. Moreover, society is an ethical organism. The distinctive characteristic of man, according to Aristotle's most true teaching, is that he is a moral being, having perception of truth and falsehood, of justice and injustice, and the like. And this is as true of the body politic as of the individuals who compose it. To say that the will of the majority makes a thing right or wrong, is a palpable absurdity. Right and wrong are what they are by their own nature. They can as little be made by man as can the properties of the triangle. No man, no number of men, can do more than declare them. The will of the majority ought to prevail only if it is in accordance with right. For the sole "ought" is an ethical ought. The fine verse of Victor Hugo is literally true:

# "Un monde, s'il a tort, ne pèse pas un juste."

All this finds no recognition in the new evangel. As little, in its exaltation of the sovereignty of the people, does it apprehend the real nature and limits of human authority. "There is no power but of God," St. Paul taught. "There is no power but of the people," we are now assured. In the older doctrine, authority in a human aggregation was necessarily limited, first, by the idea of inviolate personality, no man possessing the same authority over another as that which man exercises over the brutes; and, secondly, by the fact that it is derivate and fiduciary, the civil ruler being accounted the vicegerent of the Most High. For this august conception, the people's gospel substitutes the material force of numbers. But mere brute force has no power over my will. I am not bound to respect it, even if I cannot help submitting to it.

So much for the theoretical positions on which the people's gospel hangs. How does it actually work? As Mr. Mill has pointed out, "The will of the people means, practically, the will of the most numerous or most active part of the people . . . the majority, or those who succeed in making themselves accepted as the majority." Who are they who succeed in making themselves accepted as the majority, that is, as the representatives or spokesmen of the majority? Let us consider a little. Two things are required to enable a man to exercise rightly the political power represented by a vote. In the first place, his will should be determined by the public good rather than by his private ends; and, secondly, he should possess a knowledge of that wherein the public good consists. Is it possible to predicate such a will, or such knowledge, of the average voter? Can any candid person aver that Mr. Mill is wrong when, in the preface to the third edition of his "Principles of Political Economy," he dwells upon "the extreme unfitness at present . . . of mankind in general and of the laboring classes in particular . . . for any order of things which would make any considerable demand upon either their intellect or their virtue"? As a matter of fact, the considerations which appeal most strongly to the average voter have nothing whatever to do with intellect or with virtue. The masses are led, not by principles, but by passions; not by reason, but by rhetoric. They are the natural prey of demagogues who know best how to appeal to passions; who, "uttering great swelling words of vanity, while they promise them liberty, are themselves the subjects of corruption." The idols of the multitude have ever been those who have known best how to play upon it by arts to which magnanimous or high-souled men will not stoop. Universal and ungraduated suffrage issues, at its best, in government by mediocrities; but, more commonly, in government by scoundrels. It ostracizes culture, leisure, independence, and all the qualities which specially fit men to legislate for their country. It produces that political indifference among the men of light and leading which is the worst curse that can fall upon a nation.

If I should want a signal instance of what "Every man to count for one, no man for more than one," practically means, the

days which are even now passing over our heads might supply me with one. I suppose I may take it that in the United States of America this formula has freer course, and is more abundantly glorified, than anywhere else. Its latest outcome is the McKinley act, by which such great alterations are introduced into the American commercial system. Now, to guard myself against misconception, let me state that I am no believer in Mr. Cobden's free-trade nostrum and calico millennium. That weighty political considerations may be urged on behalf of a protectionist policy in America, and, indeed, in most other countries, I am far from denying. That such considerations have really had anything whatever to do with the passing of the McKinley act, no American with whom I have talked on the subject so much as pretends. Here is a measure which impoverishes the largest industry in the Republic, which sensibly increases the general cost of living, which confers upon the President the power of imposing or remitting taxes to the amount of fifty or sixty millions of dollars annually. Such a power is certainly exercised by no European monarch. And what is the explanation of this singular measure? As I am informed, the explanation is simply that it has been devised in order to put money into the already overflowing purses of a gang of monopolists, and has been driven through the two houses of Congress by the most nefarious means. The American party vote, it is explained to me, is controlled by "bosses," who, as often as not, are low attorneys or Irish saloon-keepers. The bosses are the very humble servants of wealthy speculators. In the almighty dollar is the motive power of legislatures and administrations. And so I find Mr. Shearman writing in the January number of the FORUM: "A few men of large wealth control each of the great parties. . . . Republican government . . . is now little better than a form among us."

Gustave Flaubert, in one of his letters to George Sand, remarks: "Le suffrage universel est, selon moi, la honte de l'esprit humain." Certainly a ballot box is a curious idol, not, perhaps, really more venerable than the phallus of antiquity. The one is the symbol of human stupidity, the other that of human passion. Both passion and stupidity are forces with which we must

reckon, but they are not exactly fitting objects of worship. Still, however false the theoretical basis of the people's gospel, and however foul its fruits, we should make a vast mistake if we should suppose it to be unmixed error. Its very popularity is proof that truth is in it. There is a true sense in its fundamental position, that all men are equal, just as there is a true sense in the Stoic paradox, that all crimes are equal. All men are equal as persons, hence their equality before the law. And from this point of view they are entitled to the same share of political power. In every form of human association there is implied a fundamental democracy. The masters of the mediæval school, whom the publicists of this enlightened age might do worse than to study, taught that the consent of the governed —they do not of course mean "a majority told by head"—is essential to a just law. And the sufficient reason is that the governed are not things, but persons, whose rational co-operation is as necessary to their own development as to that of their fellows. That consent may be explicit or implicit, expressed or implied. Every man ought to be considered in the legislation of a community; and in a high state of civilization, "considered" means "consulted." To talk of a man's natural right to a vote is an absurdity. A vote is but one out of many channels whereby man's natural right to some share of political power may be exercised. Nor is there in a majority an inherent prerogative to command. Can any one suppose that a peculiar sanctity attaches to the will of half the community plus one—to the odd man's volition? The truth is that the conflict of rights in moral beings is a counterpart of Darwin's struggle for existence; and it has often been carried on by the same method of physical force. Civilization substitutes the will of the majority, in one form or another, for an appeal to arms. It counts heads instead of breaking them—a more pacific, if an equally irrational, process. For the struggle for existence, it substitutes the noblest of human ideas founded on the natural kinship of all men. Universal suffrage may, then, be regarded as the expression, in highly-advanced states of civilization, of the equality of all men, as persons, and of their title, arising from that equality, to the like share of political power. And no doubt the participation of all in political power ought to prove a stimulant to general patriotism, and to assist in generating an intelligent interest in public affairs.

But the truth that all men, as members of the same species, are equal, cannot exist in isolation from kindred verities, under pain of becoming error. Society is essentially hierarchical. True it is that men are equal, and that therefore every man should count for one. That men are unequal, and that therefore some men should count for more than one, is also true; but this truth is utterly ignored in the people's gospel. That is the master error of most democratic publicists—an error the practical result of which is an unnatural and enforced equality, produced by leveling down. Such equality is in direct conflict with the most sacred rights of human personality, for the rights of the individual are but aspects of his one great aboriginal right to realize the creative thought of his being. They may be deduced—to speak in language that is necessarily crude and therefore open to misconception—from his mights; that is to say, from a consideration of his various faculties, subject always to the proviso that no man has a right to annihilate the rights of others for his own sake. The great, the perennial source of inequality among men lies in the difference of their intellectual constitution and in the difference of intensity of their desires. Aley αριστεύειν και υπείροχον έμμεναι άλλων is an aspiration deeply implanted in certain natures, and in it, when united with faculties adequate for its realization, is the primary cause of wealth, the motive power of civilization, the main factor of progress. "It is impossible to form a state the members of which are alike. The parts which are to constitute a single organic whole must be different in kind." So wrote "the master of those who know" two thousand years ago, and his words are as true now as they were then. Society is a conscious organism, composed of conscious individuals. In a general view, the degree of consciousness establishes a hierarchy of individuals. I am well aware that thus merely to state such a thing is not to guard against the abuses incidental to its realization. But the subject is a very large one. I can here point only to a few general principles. In so far, then, as men are in truth equal, they are entitled to

equal shares of political power. In so far as they are in truth unequal, they are entitled to unequal shares of political power. Justice is in a mean; it lies in the combination of equal and unequal rights. And so the Greek proverb, "Call that which is just equal, not that which is equal just." Universal suffrage is the unit of protoplasm. The protoplasm must be built up into organs. How built up? By recognizing inequalities of fact. The modern democratic principle of "Every man a vote, then let them fight it out"; of delegation from the numerical majority, with a prime minister to carry out the will of that majority; is the lowest form, the moneron, of the political organism. That "republic of equals" which knaves preach and fools believe in, would mean, if realized, "the extinction of civilization under the unanimous torrent of brutal hoofs and heels."

To sum up: The truth in the people's gospel is that all men have political rights, natural, inalienable, and imprescriptible; the error is that all men ought to be equivalent in the public order. The great political movement which we date from the French revolution, has done the signal service of inculcating the verity that there is a fundamental democracy in human society. But the sister verity that human society is essentially hierarchical, is equally necessary. There are elements in the body politic far more important than mere numbers; and these cannot be set aside or ignored without a grievous, nay, fatal, loss in the long run. Civilization is bound up with what Mr. Gladstone calls "the classes," and with their tenure of their proper place and special function in the social organism. There are in human life principles of subordination, of solidarity, which must be differently applied in differing ages of the world, but the due recognition of which is essential to the well-being, nay, to the continued existence, of the public order. "If you would found durable institutions," Lacordaire urged, upon a memorable occasion, "write above the word 'liberty,' 'obedience'; above 'equality,' 'hierarchy'; above 'fraternity,' 'veneration'; above the august symbol of rights, the divine symbol of duty."

W. S. LILLY.

#### FREEDOM OF RELIGIOUS DISCUSSION.

Religion differs from all other subjects, in so far as it appeals not only to the head, but to the heart. And as we do not like to hear those whom we love criticised, or even compared, it is but natural that many people should object to a criticism of that religion which they love, and even to a comparison of it with other religions. But let us ask ourselves, Does this attitude with regard to those whom we love and revere really prove that we have an undoubting faith in them? If we had, should we not rather wish to hear our friends criticised and compared, if only in order to have an opportunity of defending them, and of showing how infinitely superior they are to all others? Why, then, should we not have the same feeling with regard to our religion as with regard to our friends; always supposing that we can give a good account of the faith that is in us, and of the reasons for which we love and revere our own religion? If that religion should come out victorious from the trial and be proved superior to all the rest, surely we should have gained, not lost.

We may go a step further. Our own self-interest surely would seem to suggest as severe a trial of our own religion as of other religions, nay, even a more severe trial. Our religion has sometimes been compared to a good ship that is to carry us through the storms and tempests of this life to a safe haven. Would it not be wise, therefore, to have it tested and submitted to the severest trials before we intrust ourselves and those most dear to us to such a vessel? It is to be remembered that all men, except those who are present at the foundation of a new religion, or who have been converted from an old faith to a new one, have to accept their religious belief on trust, long before they are able to judge for themselves. And while in all other matters an independent judgment in riper years is encouraged, every kind of influence is used to discourage a free examination of the religious dogmas that have been ingrafted on our intellect in its

tenderest stage. We do not hesitate to send missionaries to Jews, Turks, and infidels, to ask them to examine their own time-honored religions. We attack their most sacred convictions; we wound their tenderest feelings; we break up the peace and happiness of their homes. And yet, if some learned Jew like Mendelssohn, if some subtle Brâhman like Rammohun Roy, ay, even if some outspoken Zulu like Colenso's friend, turns round on us, presses us to explain the Athanasian Creed, or challenges the evidence on which we accept certain miracles, we are surprised and offended, forgetting that with regard to these questions we can claim no privilege, no immunity.

When I say "we," I mean only those of us who have rejected, once for all, the infallibility of every human authority, whether the infallibility of the Pope, or the infallibility of councils, or the infallibility even of the immediate disciples and apostles of Christ. If we have once claimed the freedom of the spirit which St. Paul claimed, "to prove all things and to hold fast that which is good," we cannot turn back and say that no one shall prove our own religion, or that no one shall prove other religions and compare them with our own. We have to choose, once for all, between freedom and slavery of judgment; and though I do not wish to argue with those who prefer slavery to freedom, yet I may remind them that, even in choosing slavery, they follow their own private judgment quite as much as others do in choosing freedom. In claiming infallibility for popes and councils, they claim in reality far greater infallibility for themselves.

There are persons of very sound judgment who, though they fully approve of a comparative treatment of religions, and of the freest criticism of our own religion, still insist that it is wise to keep such studies for the few. They expressed the opinion in the case of "Essays and Reviews," and more recently in the case of "Lux Mundi," that such books ought to be written in Latin. Religion, they say, is common property. It belongs by its very nature to the young and to the old, to the wise and to the foolish, to men, women, and children. Unless it fulfills that condition, unless it is open to little children as well as to the wisest of the wise, it ceases to be religion. Now, they say, the technical character of the language which is employed in treatises

on other subjects restricts their influence to those who can judge for themselves. No one would think of restricting lectures on botany because such lectures might teach people to extract poisons from plants. No one would prevent professors of chemistry from lecturing to large classes because some of their pupils might wish to learn how to prepare dynamite. But while every other subject is thus, by its very nature, restricted to a professional class, we are reminded that a study of religion, or, at all events, an interest in religion, appeals to every human heart, and that a treatment of religion that may be quite harmless, nay, quite legitimate, with advanced students and expert thinkers, may prove very hurtful to younger minds that are not prepared as yet for such strong diet.

Now I know quite well that there is some truth in this. do not deny even that the use of the Latin language in theological discussions which were likely to prove a stumbling block to the uninitiated, had its advantages. But it is useless to discuss such proposals now. We must learn to accept the times in which we live, and to make the best of them. Whatever is now discussed in academic precincts is preached the next day in the streets, and there is neither palace nor cottage that is not reached by the million arms of the public press. Latin is no longer any protection; I doubt whether it was so altogether even in the middle ages. The discovery of Copernicus (1473-1543) that the earth moves round the sun and does not form the center of the universe, may, indeed, have been kept back for nearly a century, remaining known only to those who could read Latin; but it burst forth all the same in the Italian writings of Galileo (1564-1642), and people soon recovered from the shock, even though deprived of a much-cherished conviction.

Artificial protection of any kind is out of date in the century in which we live, and in which we must learn to act and to do as much good as we can. To expect that religion can ever be placed again beyond the reach of scientific treatment or of honest criticism, shows an utter misapprehension of the signs of the times; it would, after all, be no more than to set up private judgment against private judgment. I believe, on the contrary, that if the inalienable rights of private judgment—that is, of

honesty and truth—should be more generally recognized, the character of religious controversy would at once be changed. Restriction provokes resentment, and thus embitters all discussions on religious subjects.

I have often discussed this question with leading theologians of our time; I do not mean with men who simply acted their parts on the stage of the world, but with men who were honestly convinced that freedom of thought and freedom of discussion are wrong and mischievous within the sphere of religion, and that they ought to be restrained by authority. One of them declared to me that it had been his lot, during a long life, to read more heresy than any other living man; and he dwelt in the most forcible language on the intellectual and moral abvss into which he had gazed again and again, but from which he had at last turned resolutely away. He considered it his duty for the rest of his life to keep others from the mental agonies through which he had passed, and he would have welcomed any measures by which that abyss could be inclosed, and by which any public discussion of religious problems could be prevented once for all. All I could say to him in reply was that, if such a terrible abyss really exists, it must have its purpose in the world in which we have been placed, like many other things which entail suffering and agony, but which are nevertheless meant to serve a good purpose. To shut our eyes will not remove that abyss, while courage and faith may possibly help to throw a bridge across the dark chasm that seems to separate man from those bright regions for which his heart is always yearning.

Another great theologian used to draw, in eloquent and touching words, the picture of a child sleeping in the cradle and dreaming happy dreams of God and his angels. "Who would wake such a child?" he said. I knew full well what he meant. There is certainly no happier life than a life of simple faith, of literal acceptance, of rosy dreams. We must all grant that, if it were possible, nothing would be more perfect. Nay, I go further still, and gladly acknowledge that the happiest, and not only the happiest but also the best, men and women I have known in this life, were those who would have shrunk with horror from questioning a single letter in the Bible, and from doubting that the

serpent actually spoke to Eve and the ass to Balaam. But can we prevent the light of the sun and the noises in the street from waking the happy child from his heavenly dreams? Nay, is it not our duty to wake the child, when the time has come that he should be up and doing, and should take his share in the toils of the day? And is it not well that those who for the first time open their eyes and look around should see by their side some who have woke before them, who understand their fluttered looks, and can answer their timid questions?

Now, however excellent the motives of these faint-hearted theologians may be, not only are the remedies which they propose impossible, but it is easy to see that they would prove much more dangerous than the diseases which they are meant to heal. To encourage people, and particularly theologians, not to speak the truth openly, though they know it, must be fatal to every religion. Who can draw the line between the truth that may, and the truth that may not, be communicated? I have known theologians, occupying the highest positions in the Church, who have frankly admitted among their intimate friends that physical miracles are impossible. But they did not consider it right to say so from the pulpit, though to many of their hearers such a confession would probably have been far more helpful than many an apologetic sermon. Unfortunately there exists at present a very wide-spread impression that preachers do not preach all they know, that they will not help others to face the abyss which all have to face, and that they will not open the shutters to let in the light of the sun and the fresh air of the morning which we are all meant to breathe; but that they will keep the truth to themselves—I will not say from any selfish motives, but from fear that it might do more harm than good to others. To all this I know but one reply: Can there be anything higher and better than truth? Is any kind of religion possible without a trust in truth? Surely, he who cannot trust in truth cannot trust in anything, and his religion is vain indeed. If we once clearly understand that restrictions on religious discussions have become perfectly impossible, and that such palliatives as the use of Latin would be simply futile, the question is, What have we a right to expect from those whose duty it is to treat these questions?

It has always been considered one of the essential conditions of civilized life that the religious convictions of every citizen should be respected and protected against insult and injury. Whether a state should recognize and support an established church, is a question that admits of debate; but what admits of no debate is that the law should prevent or punish any insults offered to individuals or societies on account of their religious convictions. A state in which religious convictions entail civil disabilities, or in which religious professions lead to social advantages, cannot be called a civilized state in the highest sense of the word. Every creed is sacred to those who hold it. fetich-worshiper who calls on his fetich for food and drink, and chastises it if his prayer is not fulfilled, and the atheist who exclaims in despair, "O God, if there is a God, save my soul, if I have a soul," both hold their belief and their unbelief sacred, and they have a right to see their religious convictions, if not respected, at all events protected against insult. These are no doubt extreme cases, but even in such extreme cases toleration and charity are far more likely to prove efficient remedies than scorn and insult.

When people shall speak in an honest and in a kind spirit, they will understand one another. But for that object it is absolutely necessary that discussion and controversy should be completely unfettered. You cannot have a good fight or a fair fight if you tie the hands of the two combatants, and still less if you tie the hands of one combatant only. What we want are "reverent men, true thinkers, sincere lovers, and earnest inquirers after truth." Reverence alone will not be sufficient, but should be joined with true thinking. True thinking means free thinking—thinking following its own laws, and unswayed by anything else. But even this will not suffice. There ought to be not only loyal submission to the laws of thought; there ought to be a sincere love, a deep-felt yearning, for truth. And, lastly, that love should not manifest itself in impatient and fanatical outbursts, but in earnest inquiry, in patient study, in long-continued research. Men who have passed through these four stages are not likely to give offense to others or to be easily offended themselves.

I am sorry to have to confess it, but among the many lessons which a comparative study of religions teaches us, there is one that seems very humiliating, namely, that religious intolerance is much more common in modern than in ancient times. I know the excuse which is made for this. It is said that, as our convictions become deeper and stronger, our intolerance of falsehood also must assume a more intense character, and that we should show an utter want of earnestness if it should be otherwise. There may be some truth in this, but it is a dangerous truth. It is the same truth which led the Inquisition to order the burning of heretics because it was better for their souls, and which inflicted in our own times a less violent, though perhaps a not less painful, martyrdom on such reverent men, true thinkers, sincere lovers, and earnest inquirers after truth as Dean Stanley, Bishop Colenso, and Charles Kingsley. Let us see how the problem of toleration has been solved in other religions. Perhaps on this point also a comparative study of religions may have some useful lessons for us. For the difficulty is one that besets all religions. The religion of the young can never be quite the same as that of the old, nor the religion of the educated the same as that of the ignorant. We all know it. Bishop Berkeley was a Christian; so is Mr. Spurgeon; but think of the gulf that separates the two. And yet the object of religion is to serve as a bond between all classes, and to supply a language in which all may be able to join without dishonesty.

The ancient Indian law recognized four stages in the life of every man. The first stage was that of the pupil, which lasted till a man was twenty-three. A pupil had to show implicit obedience to his superiors, and to learn, without questioning, the religion of his forefathers. The second stage was that of the householder, which lasted till a man had grown-up children. A householder had to marry, to earn his living, to bring up a family, and to perform daily sacrifices; and all this again without questioning. Then followed the third stage, that of the dweller in the forest, the vâna-prastha, the ascetic. In that stage a man was not only released from his household duties, but his sacrificial observances also were much reduced, and he was allowed to indulge in the freest philosophical speculations—speculations

which often ran counter to the ceremonial system of the Brâhmans, and ended by replacing religion altogether by philosophy. The last stage was that of the hermit, who withdrew himself from all human society, and who willingly went to meet his death, wherever he could find it.

To us it seems difficult to understand how a religion not only full of different shades of thought, but containing elements of the most decidedly antagonistic character, could have lasted; how the dweller in the forest should not have looked down on his son who performed sacrifices which he had surrendered as useless, nay, as mischievous; how the son should not have scorned his father, who had exchanged his belief in the gods or devas for a philosophy that taught the existence of something higher and better than all these gods. And yet this system seems to have answered for a long time. Recognizing the fact that the mind of man changes from childhood to old age, it allowed the greatest freedom to old age, provided always that old age had been preceded by the fulfillment of all the duties of the paterfamilias, and by a submission to the discipline of youth.

I do not say that we see here the best solution of our problem. I call attention to it only as one out of many solutions based on the principle of toleration for those diversities of religious faith which are inevitable so long as human nature remains what it is and what it always has been. It may be that no society can exist without different classes. Our own society, at all events, as it has grown up during thousands of years, cannot exist without them. I do not think so much of classes differing from each other by wealth or title, as of classes differing by education, and consequently by culture and intelligence. It is impossible to expect that these divers classes, differing from each other so much in their education, their occupations, their manners, their tastes, their thoughts, and their language, should not differ in their religion. It is the ignoring of this simple fact which has wrought so much mischief. It has led to hypocrisy on one side, and to an unreasoning dogmatism on the other.

I know there are some who hold that, however much people may differ in other respects, they are all alike in religion. We are told that the faith of the child is as good as that of the

sage, and that an ignorant old woman, who cannot even read her Bible, may be a far better Christian than a young curate who has taken a first class at Oxford. It is the old story of the use of words in different senses. So far as practical religion goes, so far as doing good is concerned, no doubt many a poor widow who throws in her two mites is better than the scribes and rich men who cast their gifts into the treasury. And who that ever saw an innocent child dying-stretching her arms toward angel faces above, and giving her last look to all whom she loved on earth—can doubt that of such is the kingdom of Heaven? But we are speaking of something quite different, though it is called by the same name. We are speaking about the beliefs of cultivated and highly-educated men; about the conceptions that they form of the Deity, of the relation of the human to the divine, of the true meaning of revelation, of the true nature of miracles, and of the historical character of their sacred books. All these are questions which hardly exist for millions of human beings, and of which they need not take any cognizance at all, but which, nevertheless, to those for whom they once exist, are questions of the deepest import. On these questions we must claim the same freedom which even the most orthodox of Brâhmans allowed to their fellow creatures. Only, we must claim it not only for the aged who retire into the forest, but for all whose minds have been awakened, and who mean to do their duty in this life. I know how strong a feeling there is against anything like a religion for the few, different from the religion for the many. esoteric religion seems to be a religion that cannot show itself, that is afraid of the light, that is, in fact, dishonest. But far from being dishonest, the distinction between a higher and a lower form of religion is actually the only honest recognition of the realities of life. To a philosophic man religion is a spiritual love of God, and the joy of his full consciousness of the spirit of God within him; but what meaning can such words convey to millions of human beings? These, nevertheless, want a religion—a positive, authoritative, or revealed religion—to teach them that there is a God, and that his commands must be obeyed without questioning.

Do not think that this appeal for freedom of conscience comes

from the educated laity only. The educated clergy are sighing for it even more. Let me quote the words of one who has expressed what I wish to say far better than I can hope to express it, and whose right to speak on this subject can hardly be questioned—I mean the Rev. James Wilson. He writes:

"I say at once that we, educated Christian men, have a distinct duty to perform in this direction, always remembering the great law of charity. I think that the church ought to provide meat for her strong men, as well as to secure that her babes shall get milk. One of our failures is in this duty. I do not think that it can be denied that the popular Christianity of the day, whether among priests or people, in church or chapel, is for the most part far less tolerant than is the spirit of Christ, or of St. Paul, or of the great minds among Christians of all ages. That it should be so among the people is for the present unavoidable. It ought not to be so, and it need not be so among the educated laity and clergy; and they ought not to permit the intolerance of ignorance to pass unchecked, as it often does. We clergy ought to stem the tide more bravely than we do, and we ought to have done so in time past. We, as a rule, regard differences of opinion on speculative questions, and even on the terms in which we choose to present them, as very serious matters; and we expect old and young, philosophers and simple men and women, to accept unquestioningly the same terms. I think this is wrong. I do not at all think that this is the mind Much may be done to claim for more abstract and philosophic views, and especially for all views that profess to rise directly from the study of facts and to promote rightness of conduct, a place within the recognized boundaries of the Christian church."

Then, after dwelling on the value of the discipline of established forms, he continues:

"Why should we fail to recognize the fact that man ought to grow, and does grow, not only in stature and in favor with God and man, but in wisdom also? No church is honest which does not recognize that fact, and which is not anxious to secure a place of safety, nay, of honor, to those who have grown in goodness, and wisdom, and understanding in the gifts of the Spirit, and have thus attained to a truer insight into the nature of religion than can, for the present at least, be reached by the majority of educated people. A church which declines to recognize the right of the few who are "fond of wisdom," not only to be tolerated, but to be respected, must become stagnant; and if it actually encourages the ignorant intolerance of the multitude, if it identifies itself with the narrowness and exclusiveness of the uneducated or half-educated masses, it will drive its best champions into silence, and many who under proper guidance might have fought a good fight and done noble work for the church, into atheism, or what is still worse, into hypocrisy. . . . When the few cease to differ from the many, we may have uniformity and peace, but we may also have dishonesty and death. When the few are respected by the many, we may hope to have again in the church a true spiritual, that is, intellectual, aristocracy—a small heart throbbing within, but giving life and strength to the large body of Christian people without."

I have quoted this passage, not only on account of the authority which justly belongs to Mr. James Wilson as a theologian, but because of his unrivaled experience as a schoolmaster. There is, I believe, no argument that appeals so strongly to every heart as that connected with the dangers that may arise if the faith of the young be undermined. Who does not remember the words of Christ: "And whosoever shall offend one of these little ones that believe in me, it is better for him that a millstone were hanged about his neck and that he were cast into the sea"?

I quote once more from the headmaster of Clifton:

"I have said that the childhood of the individual is like the childhood of the race, and that, therefore, the education of the one will follow the lines of education of the other. And this is true, but with some important qualifications. The child of the present century is not in all respects like the man of a bygone century. The child may pass very rapidly through the elementary stages, and we do him positive injury—we dispose him to reject religion—if we prolong these stages artificially; for in that case we make him identify religion with that which he will grow out of. Further, as education advances, this transition will inevitably become more rapid. It is more rapid now than most people think. . . . I feel sure that, as a rule, religious teachers postpone the higher teaching too long."

Nothing, I believe, is so dangerous to the healthy growth of a child's mind as the impression that his parents and teachers are withholding something, or are not quite honest, when they speak of the Bible. The fact that children ask such perplexing questions about miracles in the Bible shows that their minds are awake, and that everything is not exactly like what it ought to be. The human mind, and more particularly the child's mind, is so constituted, I believe, that it cannot take in more than it is prepared for. If any one should say to a little child, who had just repeated the Lord's Prayer, that Heaven is not the blue sky, the child would listen, but would turn up his hands and his eyes just the same to the clouds above. I have often wondered what passes in the mind of a young man when he looks for the first time at his "Articles of Religion," and reads in the very first article that God is a being without body, without parts, and

without passions. Can he take in what this theological formula implies? The formula may be quite right in its negative character, and as a warning against too human a conception of the Deity; but when we try to realize it with all its positive consequences, it is far beyond the reach of any human understanding. For what would remain, if we should deduct from our early conceptions, or rather imaginations, of God, everything that we call body or shape, everything that we call parts or distinguishable elements, everything that we call passions—not only wrath and indignation, which are so often ascribed to God, but likewise pity and love, which are passions in the true sense of the word, but which we can never separate from our ideal of the Godhead?

My impression is that a boy's mind is not affected by any of these difficulties till his understanding has grown strong enough to grapple with them. Though he should repeat the assertion that God is without body, parts, and passions, he would never think of him as without those loving and pitying eyes without which God would be to him an eyeless and blind idol, not a living and loving Father. The minds of children, and those of grown-up men and women too, are protected against these dangers till the time comes when they are strong enough to face them, strong enough to reason, and strong enough to say that the words of the article must be taken in a negative sense, not in a positive one, and that, though we may deny that God has body, parts, and passions, we can never form any positive conception of him according to this formula.

It may be quite right to guard against dangers, whether real or imaginary, so long as it is possible; but when it is no longer possible, I feel certain that the right thing is to face the enemy bravely. Very often the enemy will turn out to be a friend in disguise. The use of Latin in all theological discussions would be a mere sham defense, and any restriction on free discussion would provoke a resistance ten times worse. In writing on religion, even on natural religion, we must turn neither to the right nor to the left, but look all facts straight in the face, to see whether they are facts or not, and if they are facts, to find out what they mean.

#### FORMATIVE INFLUENCES.

When I promised the editor of the Forum to cite some of the influences which have been the most powerful in shaping my character and energies, I did not appreciate the difficulties in my way. Memory is a precious guide into the realms of the past, but it is unruly, choosing its own lines of travel and loitering in pleasant places at its own sweet will. It does not incline to explore the whole life at one's bidding, or to furnish the delicate shades of color with which to present its discoveries intelligibly to the reader. It leads into rich fields, but instead of harvesting the gems for exhibition, it proceeds to demonstrate with convincing logic that the career of an individual and the special character of a life work are the results of a vast combination of subtile forces acting together.

The child of Puritan parentage, bred in a well-ordered family where educational, religious, and political affairs were familiar topics of conversation, and trained in the schools of a community that frowned upon ignorance and cherished a solid intellectual purpose, must necessarily trace the first impelling, if not determining, formative influences to such sources. If I should write my autobiography, I should be compelled to admit that my child life appears of peculiar interest as it looms up before me in a brief survey. I was reared among older people, in a household where I had no companions of my own age except as occasional invited guests, and I learned, almost as soon as I could talk, to amuse and to entertain myself, often by listening with undivided attention to animated discussions on a great variety of abstruse themes. I absorbed unconsciously habits of thinking and of formulating my own opinions, and frequently surprised my parents and their friends by suddenly appearing before them, in the midst of an exciting argument, to explain and soften what I conceived to be unnecessary differences of belief. In such cases I always had a polite and attentive audience.

My father was very tender in his treatment of me, and from first to last encouraged the full exercise of my reasoning powers.

Among the chief links in the chain of formative influences which have been moving powers for good throughout my literary life, I should mention the excellent schools in which I was trained. I was an irregular attendant while I was from five to seven years of age, and regarded the privilege as one of my sweetest pleasures. As time rolled on I never knew the sensation of being sent to school, but always supposed that I went from choice, and my grief was immoderate when the conditions of weather or health obliged me to remain at home. I was fond of study, found nothing irksome in it, and from the beginning to the end of my school experiences was generously indulged in my inclinings, to the extent of being allowed to take up any branch of learning that I pleased, and to enter any class of older pupils, provided I could master the lessons and keep abreast with credit in recitation. I recall, for instance, a swift transit that I made from the class in mental arithmetic to that in written arithmetic, at my own option, soon after my seventh birthday, which first revealed to those about me my natural predilection for mathematics. I was registered in both classes, very likely as a curiosity, but my progress and my tastes in that line of study were subsequently fostered by nearly every teacher under whose instruction I was placed. Perhaps the attention then paid to discipline in mental arithmetic was the primary cause which gave an impetus to my development.

The one teacher who, more than any other, propelled me in the direction of mathematical acquirements—which I regard as having been one of the greatest of helps in my historical writing—and whom I shall always remember with profound gratitude, was George M. Burgess, who afterward became a noted physician. He took the measure of my tendency, cultivated it by giving me extra and special lessons in mathematics, and encouraged me to rush ahead irrespective of classes. His own love for the science undoubtedly had much to do with his methods, but his teaching was so thorough, chiefly while I was between nine and thirteen years of age, that when, later on, I entered the Williston Seminary, at Easthampton, Massachu-

setts, I was assigned, after examination, to the most advanced classes in algebra and geometry, and not only kept pace easily with young men who were my seniors by several years, but carried off the prize at the first commencement. In the little country school this same teacher directed some of my earliest lessons in composition. Prior to coming under his tuition I had evolved from my inner consciousness-whatever that might be in an uninformed child—a variety of crude essays and verses, some of which, before learning to write, I had traced upon paper by printing out the words with a pen. I was delighted with the practice of composing, in which every pupil, from the oldest to the youngest, was presently drilled. Our productions were laughed at, criticised, and commended; but in whatever light they were viewed, we were always inspired to try again. The master brought out and systematized such talent as he perceived, and taught the child how to utilize it. He introduced many novel exercises, one of which I remember with more than ordinary interest, as I never met with it elsewhere. He selected a few words that had no possible bearing upon one another—from eight to a dozen usually—and as he recited them to the class these were written swiftly by each pupil at the top of a blank page, for reference; then, without a second for thought or preparation, and in a limited number of minutes, we were required to construct a paragraph, including every word named, which should make good sense.

It was during this period of my school life that my passion for reading was brought into harness, so to speak. Hitherto I had seized upon such books and papers as were most accessible, and my mind was crowded with a vast accumulation of miscellany. No flood of children's literature had then devastated the country. I had never seen a book written expressly for a child, except those at our Sunday school, which failed to interest me. Poetry was my delight. Numerous little antique volumes in the household library, including Watts's hymns and Pope's "Essay on Man," were literally worn out in my small playhouse under the sweet apple tree in the garden, where, reclining on the grass in the bright Summer sunshine, I could pore over them by the hour undisturbed. But a new light dawned in my

horizon when I was called upon at school to recite Halleck's "Marco Bozzaris," memorized long before, and its beauties suddenly were made clear to me. The poems of Tennyson were then in everybody's hands, and from "The May Queen" to "The Princess" I had already found my way. I had also pried into Chaucer, Shakespeare, Wordsworth, Cowper, Spenser, Burns, Southey, and Campbell, and had read the greater part of Milton's "Paradise Lost," Scott's "Lay of the Last Minstrel," and Byron's "The Prisoner of Chillon." What portion of all this would have remained in my memory and proved of any permanent advantage, I know not, if the teacher had not unpacked the mass and re-arranged it in good order. Extracts from these poetical works, and from many others, were turned to profitable account as reading lessons, and many of the gems of the great poets were recited in concert by the whole school.

My first romantic love of nature was awakened by the poems of William Cullen Bryant, then in the zenith of their popularity. There was something tangible in the pictures that he drew; his themes pointed out the charms of the woods and the mountains and the fields, which were all about me-before my eyes on every side. The distinguished poet was our neighbor, or, to be more exact, his birthplace was on a picturesque hillside in sight of my own birthplace, and he usually came to the old homestead every Summer. When a boy, he attended school with my father, and I had asked so many questions about how he looked in his youth and what he said and did, that I almost fancied I had actually seen him write "Thanatopsis." His "Monument Mountain" was one of our special school recitations, and I was never satisfied until I had visited the ragged precipice which suggested the production. His "Forest Hymn" and "Song of the Stars" were as familiar to me as the alphabet; while "The Death of the Flowers" brought vividly before my vision Bryant's beautiful sister, whose rare loveliness I had often heard described in our family circle, and to whom he refers as

"The fair, meek blossom that grew up and faded by my side."

Professor Burgess was a classical scholar, fresh from one of the notable colleges of the country, and ere long had formed a small class in Latin, of which I was a voluntary member. He

smiled when I asked permission to join it, and told me how dry and tiresome I should find the lessons. But I was resolute, and he did not object; and I have no recollection that his predictions proved true. In the mean time the ordinary branches of a child's education were by no means neglected. Geography in particular was taught in the most interesting fashion. The rudiments of drawing were brought into service, and prizes were given for the best outline maps of States that could be made at a moment's notice upon the blackboard. Very little attention, I am sorry to say, was paid to history, and yet we were guided through the tales of Peter Parley and taught some useful statistics about the early Indian wars in America. I learned the story of the Revolution from the lips of my grandfather. As in many another school of later date, it was esteemed much more advisable to instruct in the whole range of English literature than to look after the affairs of our own country.

Works of fiction were not at that day permitted a place under our Puritan roof, and although I had seen Cooper's, Captain Marryatt's, and Sir Walter Scott's novels, and the works of Washington Irving, occasionally in the houses of friends, I had not yet learned the nature of their contents. But there came a time one bright morning when I flitted away to school with a strange-looking, unbound book hidden in my sachel. I had surreptitiously borrowed it from my brother's table, where he had left it by accident. It was "The Scottish Chiefs," by Miss Porter, a work that was destined to create within me a new want, and to turn my thoughts to the reading and study of history. Turning points in life are not always mere accidents, and I cannot designate this simple event as really a turning point, but its influence is still with me. I read the book by stealth, concealing it under my text book during school hours, when my quiet attitude led my teacher and others to suppose I was absorbed in study. The book opened to me a bewildering view of gorgeous castles among the grand cliffs of beautiful mountains, with Gothic arches, central towers, and circular flanking ramparts of stone; and of handsome knights in armor, literally iron-clad, with hosts of followers, prancing about the Scottish country on fine horses at all times and seasons, with their long plaids streaming in the

wind. The story introduced me to an age when danger was the pastime and arms were the occupation of the European nations, and when gray hairs were seldom seen under a Scotchman's bonnet. Sir William Wallace, as described in this novel, was less than twenty-five years old, but a man of gigantic frame, larger even than Washington, and of great personal beauty and magnetism. He was a marvelous and magnanimous hero, as I found him, and my wonder was that I had never heard of him before. I immediately started on a crusade into the past, in quest of more knowledge. In exploring my father's library I found upon the top shelf two dilapidated volumes of ancient date, entitled "The History of Scotland," which I brought down in much excitement and examined with the greatest care. They were poorly printed in old-fashioned type, and from their appearance probably had not been opened in a generation. But I eagerly read them, from cover to cover. They were intensely disappointing books, dull and commonplace, telling me very little about Sir William Wallace, for whom I was searching; yet they increased my appetite for further information, and taught me forcibly the great truth that we draw all our learning from the past—that to-day is the pupil of yesterday, this year of last year, and that drop by drop the activities of each successive year are distilled from the experiences of the centuries gone by. Henceforward I sought historical books on all occasions, until the pursuit became a fascination. I was naturally at first interested in Scotland. I shall never forget the singular impression made upon my mind by perusing "The Life of James V.," upon which was founded the historical novel "Jane Seton." I soon had in my hands the story of the unfortunate Mary, Queen of Scots, which led me with celerity into England's history. I was so fortunate as to discover, here and there, odd volumes which I could borrow—there was then no public library within my reach—and ere very long I had faithfully traced the English chronicles from Julius Cæsar to Queen Victoria. In the mean time I had learned something of old Rome, and I could not rest until I had tripped through her printed history. There was not a country in Europe to which I was not similarly drawn, and whose history I did not secure, in one way or another, for perusal.

In this historical reading I had very little help or sympathy, either at home or at school. Both parents and teachers seemed to look upon it as a mere matter of childish fancy that would soon wear itself out. I encountered many works of a different character, while hunting for histories, which I did not omit to read. Sometimes it was a novel which I would enjoy in secret, then a work of travel or a poem. I read Irving's "Knickerbocker's History of New York" twice, and wondered how much of it was true; and among the American stories that fell in my way and captivated me for the time were Paulding's "The Puritan and his Daughter" and Kennedy's "Horseshoe Robinson," the latter of which I should like even now to read again, if I could find it. My opportunities for reading were greatly facilitated by the isolation of our home, and the consequent absence of distracting diversions. We were near enough to the metropolis to partake of its literary culture, and sufficiently remote to escape its dissipating wastes, while the atmosphere acted like a tonic in stimulating intellectual industry.

In my subsequent experiences in educational institutions I seem to have been conducted by the same or by a similar momentum, constantly broadening, it is true, but diverging very little from the current of my apparent destiny. Mathematics was given the first place in my curriculum every time, for there was always more in the science that I wished to learn. Then followed the languages, in which I became greatly interested, and philosophy and English literature; after which I was agreeable to any other pursuit that the teacher might suggest. History—as jotted in my little note book—was "to be read at my convenience, as my own private affair." American history was not then in my mind apart from general history. It was long after I had left school before I discovered its manifold and picturesque attractions, and became impressed with its singular neglect by educators.

When, finally, in the drift of remarkable events, I found myself engaged in the production of an historical work of great magnitude, having for its subject an American metropolis and one of the most important cities on the globe, I recognized my early attainments as my strongest pillar of support. My work was issued in parts of forty-eight pages each, that it might have the benefit

of the judgment of intelligent readers and critical scholars upon each successive portion; and I was earnestly and anxiously asked how I was to treat of the complicated problems involved—such as the rise of churches, newspapers, schools, charities, and all the other institutions which go to make up a great metropolis, with correct pen pictures of public characters, manners, customs, social life, and political disturbances in the various eras—in a clear and comprehensive style that should be well balanced throughout. It was apparent that no theme must be given more space than its relative importance deserved, and that I was expected to infuse life and color into every paragraph, and to hit the happy medium between the dull repetition of details and the indulgence of fancy. I had undertaken to introduce biographical sketches and family history into the narrative of public affairs, which no American historian had hitherto attempted, and my material was to be drawn from innumerable unknown sources. I was pledged to unravel the tangled and obscure threads of New York's early history while it was yet a little Dutch town; to present, step by step, its growth, its early boundaries, its material aspects; and to show clearly the gradual development of the enormous commercial interests which have changed the whole face of a continent. I was also deftly to reveal the relations that existed between this country and England, France, Holland, and Spain during our entire history. "Even if you are able," was the pressing inquiry, "to carry out your ideas of minute research, how will you acquire the art of exact discrimination?" The question was one that could be answered by deeds much better than by words. If I had acquired the gift to accomplish what was desired and expected of me, it was certainly due in a large measure to that preparatory training unwittingly inaugurated in my infancy. The subtile power that regulated my sense of proportion, enabling me to distinguish the essential from the non-essential in the grave problems with which I had to deal, and which definitely contributed to my habits of concentrated attention, was easily discoverable in the principles of mathematics, which by many in my school days was considered a most useless acquisition.

It must be borne in mind, however, that when we look for

formative influences, no one can properly be considered alone. It is the union of many that produces satisfactory results. But for my acquaintance with European history, obtained when my mind was in a receptive condition, mathematical science would hardly have influenced or promoted any practical achievement, for I should never have sufficiently understood and appreciated the peculiar character of my own country to have ventured into its history. Then, again, my varied reading, especially my study of the poets, brought me into intimate relations with the growth and expansion of American literature, and acted an influential part in shaping my literary and historical tastes. It brought me into contact with the great facts of life as revealed in human experience, and furnished the mental exercises requisite for healthful and symmetrical development. It would be impossible to state which of all these several formative influences exerted to the greatest degree the secret power that held me devoted to my chosen field of research for fifteen well-rounded years, without variableness or shadow of turning. There was an irresistible charm somewhere, for I had not foreseen the magnitude of the work that I was to perform. The structure became a matter of growth instead of architecture. And the educational influences behind me seemed to increase in magnetism and vitality as I drilled the raw material into order.

I ought, perhaps, to speak of the special influence for good that has come to me through the discipline of the work itself, although I am aware that the outlook toward the far past is the chief concern of the present series of papers. The formative influences of my life were realized in the volumes to which reference has been made, but they have reached into my subsequent work as an editor and an author with even greater force and significance. Together with the education which practical experience provides, they have helped me into a loving friendship for our whole vast and beautiful country; they have widened my views, enabled me to look upon all sides of a subject, and inspired me to keep my mind ever open to fresh discoveries and enlarged possibilities in the direction of historic truth.

MARTHA J. LAMB.

### A NEW POLICY FOR THE PUBLIC SCHOOLS.

Social problems are raised as frequently by insensible and unobserved changes in existing conditions, as by a clear forecast of the principles involved in them. An example in point is public instruction in the United States at the present moment. Our public schools are apparently prosperous, and command the same popular interest as in previous periods. There has been some stir in the popular mind concerning them during the last year, but hardly an apprehension of coming disaster. Yet the facts in the case should lead us to anticipate the need of a change of policy in the somewhat near future. A very considerable number of private schools in the several States have always been engaged in primary work. These have more or less weakened and disparaged public schools. In some States intermediate instruction and collegiate instruction have been largely in the hands of religious bodies. The feeling has prevailed in many churches that each denomination should provide for itself higher institutions of learning suited to its own sense of fitness. Yet the limits of this private effort have been narrow. The public system has not been seriously embarrassed by it, and has had no occasion to expect determined or extended attacks.

For some time past, however, some churches, more particularly the Roman Catholic and Lutheran, have been occupied with a systematic and extended effort to place the children of their households, as far as practicable, under instruction of their own providing. It has been stated in the Forum\* that the parochial schools of the Roman Catholic Church now include more than 600,000 children, while those of the Lutheran Church, in Wisconsin alone, embrace 20,394. So widely-sustained a method of private training, by which the public schools are displaced, promises to bring far more serious embarrassment to our public method than any which it has hitherto encountered.

<sup>\*</sup>December, 1889, p. 380.

Several events have recently occurred which indicate the nearness and the character of the coming strife. Some time since, certain Roman Catholics in Edgerton, Wis., brought a complaint against a district board for allowing the reading of the Scriptures in a public school. By the first adjudication the board was sustained. The case was then carried to the Supreme Court. That court decided that the use of the Bible in the public schools of Wisconsin is inconsistent with that clause of the State Constitution which forbids "sectarian" instruction. A somewhat similar question is now before the courts of Illinois in connection with the opening religious exercises in the State university at Champaign. The decision of the Supreme Court of Wisconsin has drawn out sharp criticism, and will serve to widen the division between public and private schools. It will tend to modify the instruction in the former somewhat unfavorably, and will be thought to affect it far more unfavorably than it actually will. The weakness of public instruction is in its want of moral vigor, and this decision will seem to many to enhance that deficiency. It will be difficult, if not impossible, to separate vigorous moral influences from the spiritual inspirations with which they are associated in the community, and to employ them effectively in this mutilated form. The Roman Catholic and Lutheran Churches will be greatly strengthened in their assertion of the irreligious character of public schools, and other denominations, already sharing the feeling in reference to collegiate work, will be led to extend it to the lower grades of instruction. This decision will tend to enhance the very evil which gives rise to it, and to make our public schools increasingly secular. Thus a real weakness may readily grow out of an imaginary one.

A second more significant event in Wisconsin has followed this first discussion. At the last session of the Legislature a law was passed, without opposition and with no division of political parties, renewing the requirement that each child between the ages of seven and fourteen years shall attend school not less than twelve weeks in each year, and declaring as follows:

"No school shall be regarded as a school, under this act, unless there shall be taught therein, as part of the elementary education, reading, writing, arithmetic, and United States history, in the English language."

This ground had been covered by previous legislation, but the laws had not been enforced. The conditions are somewhat peculiar in Wisconsin, though they are shared by most of the northwestern States. Not only is there a large percentage of Germans, Scandinavians, and other foreigners in the population, but considerable sections are occupied by them almost exclusively. Customs, institutions, and methods of thought have thus been bodily transferred to the new State, and no opportunity has been given to modify or to soften them by an interfusion of native citizens and American sentiments. The Lutherans in Wisconsin, like the Puritans of old, have built their churches on the hills, and by virtue of extent and solidity of immigration they dominate the surrounding regions. These conditions in some communities give little or no room for public schools; in other communities they greatly reduce the attendance on them, or impart to them something of the character of parochial schools.

The Lutheran parochial schools in Wisconsin number 396 and contain 20,394 scholars. To these are to be added 264 schools and 36,271 scholars under the direction of the Roman Catholic Church. The language used in the Lutheran schools is very frequently German, often German and English, and only in a minority of cases English alone. Direct instruction is given in the English language in a portion of these schools, the time occupied by it varying from two to twenty hours each week. In 145 of them no instruction in English is given, though a larger or smaller proportion of the scholars attend the public schools a part of the time. In a few schools not only is German used exclusively, but no instruction is given in English and none of the pupils attend the public schools. These statements are made on the authority of a pamphlet by Christopher Koerner, of Milwaukee. It opposed the Bennett law, and its statistics were taken from the reports of the Lutheran Church.

It is not surprising that, attention being drawn to this state of facts, considerable interest and solicitude were excited in the minds of a few. The result of this feeling was the Bennett law, which, however, in no way interested the public mind during its passage. The vigorous opposition that it soon received from the Roman Catholic and Lutheran Churches was unexpected. Gov-

ernor Hoard, with a good deal of ardor, early espoused the law. In April last he addressed the Teachers' Association at Waukesha, commending the act in its compulsory features. He said:

"The number of those who are reported as attending the public schools twelve weeks or more is 210,077. This leaves 73,979 who did not attend the public schools twelve weeks or more during the past year. The reports concerning the number who attended some private school twelve weeks or more during the past year are very meager and unsatisfactory, but up to the time when these figures were obtained the number reported was 24,319. This would leave 49,660 between the ages of seven and fourteen who did not attend any school last year. To allow for mistakes, we cut the number down to 40,000. There they stand; an army of ignorance growing up in our midst, denied, by cupidity and bigotry combined, the privileges of even the free schools of our State. A large proportion are purposely kept in this condition. . . . I know of an instance in Jefferson County where a young man, twenty-six years of age, has lived all his life within sight of a district school, yet he has never attended the school, and is unable to make himself understood in English. He has attended the church school and can read and write in German."

Roman Catholics and Lutherans were deeply dissatisfied with the law and desirous to secure its repeal or to render it inoperative. The Republicans took up with much reluctance the issue thus brought forward, as it was likely to alienate a large number of Germans. They gave, in their platform, a very uncertain sound, seeming to sustain the law and yet to deny in application the principle on which it rested. Nor were the Democrats much more consistent. They affirmed the general principle of compulsory education, but bitterly attacked the law. The result of the campaign was a disastrous defeat of the Republicans. Though the last election was to the Republicans a deluge—and when there is a deluge there is always water enough to drown a party—the particular weight which Republicans in Wisconsin most immediately felt about their necks was the Bennett law. Neither of the great parties in Wisconsin is likely, therefore, for years to come, to be in haste to champion the principle on which the Bennett law rests. Nor will previous laws of like import be effectively enforced. A party which is to espouse compulsory education in Wisconsin must have an appetite for a public duty well done at least equal to the appetite for office.

A somewhat similar series of events has occurred in Illinois,

though in a less pronounced way. A compulsory law, which went into action during the present year, came to the front in the last political campaign. Both parties gave it consideration in their platforms. Their statements had the same general, yet doubtful, character which belonged to the party announcements in Wisconsin. The Republicans pronounced in favor of compulsory education, but reduced the force of the declaration by subsequent concessions. The Democrats called for the repeal of the compulsory law, but indicated a kind of compulsion that they were willing to support. The following pledge was offered to candidates for the Legislature by the German Lutheran and Evangelical school committees:

"I, the undersigned, if elected to the Thirty-seventh Legislature of the State of Illinois, do hereby pledge myself to make all lawful efforts toward repealing the compulsory school law approved May 24, 1889, and now in effect; or toward so revising it that said law will not interfere, directly or indirectly, with parental authority over the child in determining the means and extent of its education, will not prescribe a certain school or class of schools where it shall be educated, will not restrict religious liberty in any form, and will not leave parochial or private schools subject to State supervision or control."

Conditions very similar to those in Wisconsin are present in Iowa, Minnesota, and other north-western States, and will naturally lead to similar adjustments. The politicians, prior to the recent disaster, were very reluctant to take up the school question in Wisconsin, and, taught by that defeat, they are likely to give "the little red school house" a wide berth. It will go floating down the tide, shifting for itself, with such good fortune as the better sentiments of the better citizens may bring to it.

In these events, which are of a far-reaching character, we see the occasion and the demand for a change of policy in public instruction. The nation, as a whole, has not lost faith in its public-school system. It has been inclined rather steadily to extend it and to support it by all needed legislation. Especially has there been an inclination toward compulsory attendance on primary instruction. If the maintenance of these schools is forced on the tax-payer, it is felt to be but fair that the use of them by those for whom they were established should also be obligatory. A large percentage of those who most need these

public schools, and with whose training the safety of the public is most immediately associated, are liable, by the negligence of parents or by truancy, greatly to reduce or wholly to waste the advantages which the public has provided for them. fully-guarded and moderate coercion, therefore, has come to be, considering the increase of alien and irresponsible citizens, a natural, if not a necessary, step in completion of our educational system. We are not willing that the system itself should be weakened by the very extent of the ignorance which demands it. But if education is in any degree to be compulsory, it becomes necessary, since private schools and public schools exist side by side, to define not merely the amount of attendance required, but also the sort of instruction which shall accompany it. The public is interested in a certain kind and measure of knowledge, and not in the external performance of an act. If, therefore, the public prepares to insist on education under its own definition, even in a limited degree, the private schools, which are widely displacing the public schools, must stand in some recognized organic relation to them. We have hitherto partially accepted this connection in one direction, but we have steadily overlooked it in another. Wisconsin, for example, in the last conflict, attempted to define within narrow limits the course of study which would be accepted in private schools in place of public instruction, and vet was conceding to these schools, as regards support, no place whatever in its general system. Not only must the parochial school be sustained at the expense of those who establish it, but its supporters must also pay their proportion for the maintenance of the public schools, even when the work in their own school is accepted by the public as a just equivalent of its own work. This gives us, using language broadly, taxation without representation. The support of two sets of schools is thrown on the conscientious tax-payer, and he is told that his redress lies in giving up a method to which his convictions have led him.

This public policy was bearable when private schools were comparatively few in number, sporadic, and indicative of no decisive division in reference to moral and religious training; when no compulsion was in force and no definite terms of substitution were accepted. Now, when religious instruction is

coming to be distinctly disclaimed in the public schools, when private instruction makes this disclaimer a ground of its own existence, and when parochial training is first defined and then accepted in place of public instruction, this policy assumes the appearance of extended and glaring injustice. It can be resisted, and has been resisted, on the ground that it infringes personal liberty—the liberty to order one's own innocent action at one's own cost, in one's own way. "We maintain our own exclusive right to teach our own religion to our own children, in our own schools, at our own expense, in our own native language, if we choose."

The underlying principle which sustains the public in its interference is thus covered up and lost sight of in the unfortunate circumstances of its application. This principle, that it may not bear the appearance of tyrannical intermeddling, should be accompanied by the principle that all instruction which is accepted in place of public instruction shall have the same rights as public instruction. Those who are adequately educating their children under the inspection of the State should not be called on to bear exactly the same burdens as if they were in neglect of this duty, or to render the duty twice over-once in a way conceded by the State and once in a way ordered by it. intrinsic injustice of our existing policy has been concealed from us by the accidental, changeable, and capricious impulses which have hitherto given rise to private schools, and by the fact that, for the most part, they have been established by the well-to-do simply in defense of class feeling. Now that the parochial schools express a religious conviction—no matter how mistaken that conviction may be—are closely and extendedly united within themselves, and are the chosen means of those who can ill endure a double expenditure, the bearings of this public policy are entirely altered. The sense of injustice will deepen year by year, the religious sentiments which underlie the parochial school will be fed by the very opposition which they meet, and the public feeling arrayed against these schools will itself become an intolerant sentiment, of belief or unbelief, associated with religion.

No condition could well be more hostile to the steady growth of public instruction than this policy, under existing circumstances. The public-school system has always been subject to

attack, and is now subject to it, as not fulfilling its purpose and as a wrongful trespass on the tax-payer. Some, who are very earnest in educating their own children, lose faith in the efficacy of education the moment it is applied to the public at large. Some, who avail themselves to the utmost of higher education that is almost wholly eleemosynary, and laud it as the wisdom of all the ages, are afraid that we are pampering the poor by the luxury of the provision that we make for their instruction. We cannot afford to add to these many querulous and illiberal sentiments, which already sufficiently weight our efforts for the improvement of public schools, an extended, combined, and reasoned, if not well-reasoned, religious opposition. It would, indeed, be infinitely better if this conflict had not arisen; if the children of the Republic were adequately and uniformly trained in public schools, and so were united, from the first, in social sentiment and intellectual outlook. This union has, however, ceased to be possible. Our wisdom now lies in reducing the division as much as may be, in giving full opportunity to the healing processes of time, and in putting aside that obstinacy and arrogance that cause us to think only one way and one result admissible.

The partial coalescence of public and private methods of instruction, and of religious schools with public schools, may not prove as disastrous as some anticipate. It is the method the English are adopting in a tentative way, and virtually the method of higher education in New England. The colleges of New England are, in general, under the direction of religious bodies, and some of the best of them have received aid from the state. If they had been helped to a much greater extent, their relation to the public and service to the public would not be materially altered. They meet, in a liberal manner, the ends of general education. A large view of the objects to be gained, a wide, sympathetic grasp of existing conditions, and a clear sense of justice, will be able to find a way, and an ever-widening way, through present perplexities. Our public policy must show itself flexible—fully capable of fresh adaptations. Bigotry may pertain to a too inflexible insistance on a method intrinsically desirable, as well as to a method in itself inadequate and narrow.

JOHN BASCOM.

## OUR BARGAIN WITH THE INVENTOR.

A United States patent is a contract. The parties to it are the inventor on the one hand and the people of the United States on the other. The inventor, by a public record, informs the people concerning a useful discovery which he has made, which must be original with him and new in the United States. In return, the people, by their letters patent, secure to him the exclusive right to make, to use, and to sell his invention for a limited number of years. At the end of that period the contract terminates and the discovery belongs to all the people forever.

A patent, therefore, does not flow from the bounty of the community, as might a pension, or a subsidy, or a medal. It belongs to the inventor by right. It comes into existence in consequence of the legal establishment of a certain state of facts; namely, that the invention is new, useful, and original with the claimant. This disclosure is the consideration on the part of the inventor, who therefore gives to the community something of value which it did not before possess. The community gives to the inventor, not something of value which it already had, as where a part of the public domain is patented to a settler, but simply protection. If the invention is valuable, so is the protection; if the invention is worthless, the protection is without benefit; thus the contract is reciprocal and evenly balanced. The validity of a patent depends upon the maintenance of the facts established. To determine issues of validity is a function of the United States courts; to determine whether the consideration probably exists, and to make the contract itself, is the function of the United States Patent Office.

"He who receives an idea from me," wrote Thomas Jefferson, "receives instruction himself without lessening mine; as he who lights his taper at mine receives light without darkening mine." An idea once made known is subject to human control only when incorporate, and therefore it can become the subject

of patent only when it is tangible and existent. In the beginning it may be regarded as a marvel; in time it becomes a necessity of life, a manufacture, perhaps the basis of a great industry. In a certain sense the invention then detaches itself from the inventor; for the patent no longer protects only one man in his right, but through him many men in their rights. The patent system of the United States has now completed its one-hundredth year. The experience of the century shows that the advantages incident to the patent contract constitute a sufficient incentive, not merely to lead people to publish their inventions, but to make them invent. The number of patents granted yearly has steadily augmented; it is now more than 26,000 and is increasing. Under the fostering protection of patents we have developed, and are developing, inventors as a distinctive national product; and because of this we are enabled to exhibit to the world a growth and a prosperity, as a manufacturing people, unexampled in the history of mankind.

The patent contract secures to the inventor his right for a fixed period of time, absolutely and without limitation, save by the obligations which every man owes to society. sumes that self-interest will best conduce to the development of the invention, and therefore it imposes on the patentee no recurring taxes, nor does it compel him practically to operate his device. During the protected term he may restrict or prohibit its use as he pleases. The measure of his reward is what he can get, that is, what the public chooses to pay. A man is not compelled by law to use a new invention. He probably did not feel the need of it before it came, and if he does not wish to pay the price asked, he is perfectly at liberty to let it alone. This is the way in which most people in large cities deal with the telephone. It is necessary only to wait until the patent expires, and then the patented thing may be enjoyed for all time without let or hindrance. On the other hand, there is nothing to compel the inventor to reveal his secret knowledge. He has a perfect right to keep it to himself, and to use it solely for his individual advantage; and the law will protect him in that right. He need never obtain a patent unless he chooses, no matter how greatly beneficial the new idea might be to the community. If the public wants the benefit of his discovery, it must offer a sufficient inducement to make the inventor tell what he has found out.

A patent grant is therefore not made in payment for an invention, in the sense that one is a measure of value for the other, but in return for its disclosure. No one can assess the value of a new discovery to the human race for all time. The more important it is, however, the more incommensurate become the returns obtainable during the patent period. The millions made from the patents on the sewing machine, or the reaper and mower, or the telegraph, or the telephone, are utterly inconsiderable beside the enormous benefits which the public acquires through all futurity from these inventions. Whether the thing contrived is to underlie a great industry or whether it is merely an improved pin, the inventor, to be entitled to his patent, must disclose it fully, and without restriction or reservation; so that, when the patent term shall be finished, the public may be able to make and use the thing as well as he himself can make and use it. He is entitled in return to equally full, unreserved, and unrestricted protection. To lessen the enjoyment of that protection, or to limit it by harassing requirements, such as taxes or obligations to work the invention, as the opponents of the system have proposed, would amount simply to failure on the part of the people to comply with their side of the contract.

In order to insure, as far as possible, that the description furnished by the inventor shall be so full, clear, and exact that any competent workman familiar with the art to which it belongs can make from that description the thing described; in order that his claims may set forth his invention and no other, so that both patentee and public may definitely learn therefrom what is protected; in order to prevent misdirected energy in the reinvention of old things, or in labor upon wild and chimerical notions; in fine, in order to avoid the grant of useless and invalid patents, we have established a system of official examination into the novelty and utility of every invention for which a patent is asked. This is the work of the Patent Office. More particularly this examination seeks to find out whether or not the invention has been patented or described in any printed publication in this or any foreign country before the applicant's discovery, and

whether it has been in public use or on sale in this country for more than two years prior to his application. If it has been so patented, or described, or publicly used, it is not patentable.

Logically, such an examination, if it should terminate favorably, ought to be followed by a patent guaranteed to be valid. But a perfect examination is impossible. Even if we should collect all the printed publications in the world and digest them so as to make their contents accessible, still there is no way of obtaining information as to prior invention by anybody and everybody throughout the land. The British method is to grant, as a matter of course, any regular application for a patent, no matter whether the device has been the subject of a former patent or not, and then to leave the patentees to fight out their respective rights afterward in the courts. Whether, as an abstract proposition, the examination system is better than this, is open to debate. The fact remains that our patent system, which has undeniably promoted our national prosperity, is founded on an official examination, which, as its ultimate result, tends to protect the rights of both parties to the contract. Obviously, the more thorough and intelligent the examination, or, what is the same thing, the more efficient the Patent Office, the better for the nation and for its inventors. Is the Patent Office, as now organized, efficient? If not, why not?

At the very outset of this inquiry we are met by a host of anomalies. As a part of the machinery of a government no function of which is to make a profit out of the people governed, here is an institution not only self-sustaining, and as such unique, but paying into the United States treasury a surplus revenue of nearly \$230,000 a year. And more than this, its accumulated profits over and above all expenses, including the cost of its building, only a part of which it is permitted to occupy, now form a fund of nearly \$4,000,000. All of this vast amount has come out of the pockets of inventors, and not one cent from those of the tax-payers at large. The inventors, therefore, and not the general public, maintain—and more than maintain—the Patent Office. They have a right to demand the most efficient service that it can give them, for that is what they pay for. When a surplus is put aside, it is not an unreasonable presumption that

the service is so efficient that the extra money is not necessary for further improvements. Now, let us consider the facts.

The presiding officer of the Patent Office is a commissioner who, to meet all theoretical requirements, would need nothing short of omniscience. He is a judicial officer, an executive officer, a legislative officer, and an accounting officer, all in one. As a judge, his jurisdiction is both original and appellate. As a law-maker, he devises rules having the force of statutes, subject only to the perfunctory approval of the secretary of the interior. As an executive officer, he regulates and controls the ministerial affairs of the Patent Office, and commands its 589 employees. As an accounting officer, he receives the immense sums paid into his bureau and accounts for them. He is presumably an expert in every branch of applied science, a skilled mechanic, a consummate electrician, and a chemist of high ability; and perhaps he ought also to be a "lightning penman," seeing that about one tenth of his time is wasted in the clerical work of signing patents. Of all the bureau officers that have power to nominate persons to a cabinet minister for appointment, he is the only one without whose nomination the minister cannot appoint. This superior being, vested with all these multifarious capacities, we expect to obtain for the sum of \$5,000 a year; which is perhaps the most remarkable fact of all. We do not get him. To make sure that we shall not, we have converted the office into political spoils, and we have filled it, not infrequently, with lawyers from the cross roads and with experts from the stump. They give up the ghost, officially, after average terms of eighteen months of the hardest work that they ever did in their lives, and then they invariably begin practice as patent attorneys. In a very few instances we have secured for a short time the services of a competent and experienced patent lawyer, such as the present incumbent, Mr. Charles E. Mitchell, of Connecticut. During such administrations, undertaken obviously by these men at no small sacrifice of personal interests, bad rules are abandoned, worthless employees are weeded out, absurd and conflicting decisions—alas for their number!—are harmonized or reversed, and the service is generally improved. At other times the office either remains in statu quo, or retrogrades.

By a fiction of law, the commissioner is supposed personally to know all about the 40,000 applications that are filed every year. As a matter of fact, he probably hears of about one in tifty. They are handled by a corps of examiners, who are graded in various ranks in a semi-military manner. All possible subjects of invention are divided into about 190 classes, and these, in turn, are subdivided into more than 4,000 sub-classes. A certain number of classes are assigned to a division, over which a principal examiner presides. He is aided by a number of assistant examiners of different grades, who do the actual work of hunting up the prior patents or publications which show the invention claimed by the applicant, or which, in their opinion, show it—often a very different matter. The principal examiner in each division is a judge of first instance for the decision of all questions of law and of fact affecting an application. No matter how enormously important an invention may be, no matter what great interests are at stake upon the possession of the patent which is to secure it, the whole matter is subject to his supervision. He may harass and hamper the inventor with restrictions and keep him waiting for years. He may grant illegal and improper claims, and so subject the public to vexatious litigation and seriously impede the progress of great industries. It is true that the inventor may appeal from him, and thus secure rights improperly denied; but there is no redress for the public, against the allowance of a bad patent, other than in the courts. The men upon whose shoulders we place these great responsibilities are paid the wages of young naval lieutenants or of ordinary book-keepers—\$2,500 a year. The average ability of the principal examiners is much higher than might be expected in view of the compensation given them. Most of them are painstaking, self-sacrificing, patient, and able. Others are the reverse. Their methods are various in the extreme. When they do not happen to be lawyers, their rulings in matters of law are frequently highly original. Some of them endeavor to assist the inventor, and with patient kindness correct his errors and resolve every possible doubt in his favor. Some favor strict neutrality. Others seemingly labor under the idea that they are government attorneys, paid to find out how not to grant a patent. The official action of one is never a precedent for that of another. In short, they are thirty quasi-courts, interpreting law and fact each after its own fashion.

There are also 169 assistant examiners, who are presumably competent scientific experts, but who receive clerks' wagesfrom \$1,200 to \$1,800 a year. They are mostly young men. Washington possesses four large law schools where evening instruction can be obtained, and the utility of a government position which at once furnishes a support and a chance to practice law on the inventor, is plain. Tenure of office is therefore shortened not merely by inadequacy of salary, but by the resignations of incumbents in all grades, from the commissioner down, to enter practice as patent attorneys when sufficient education has been obtained. The evil is twofold; first, the Patent Office is converted into a training school, so that the service becomes inefficient; and, secondly, there is nothing to prevent the retiring official from taking with him, and using for the benefit of private clients, copies of pending applications or other secret information, the revelation of which may be highly valuable to one competing interest and correspondingly injurious to another. been done; it should be made impossible. A law in other departments prevents a former government employee from practicing before the office in which he served, until two years after the end of his term of service. A similar term of incapacity should be imposed on ex-officials of the Patent Office.

Although the standard of honesty in the Patent Office is exceedingly high, and fraud of any sort is very rare, the fact remains that there is no fiduciary institution in existence where the temptation to be corrupt is greater. The examiner's work is done in secret, and not in the blaze of publicity which surrounds a court. The proceedings are ex parte, and the decision of issues involving great pecuniary interests often turns upon abstruse technical distinctions incomprehensible to the public at large. Public opinion is strongly arrayed against the underpayment of bank officials and others in places of trust. For the people to subject their own servants, charged with far greater responsibilities than those that fall to the lot of any private employee, to such strain, is unjust to them and contrary to sound

public policy. Conditions which include both inadequate pay and ever-present temptation are notoriously unsafe.

There is also in the Patent Office an extraordinary tribunal charged with determining "interferences," or issues of priority between rival inventors, and presided over by an examiner paid as inadequately as the others. Here occur probably the bitterest litigations in the world, for the fight of an inventor for his invention is like that of a tigress for her whelps. The practice of the tribunal is governed by the equity rules of the United States courts, and it enforces technicalities to a degree which finds a parallel only in criminal cases. Neither the judge nor the attorneys are necessarily lawyers, and the court decides matters of law, fact, and metaphysics with equal readiness. The decision of the commissioner, on appeal, is final between the parties. But as the defeated contestant frequently infringes his adversary's patent after it is issued, the whole controversy may be fought over again in a court of law—a condition of affairs much needing reform. Between the commissioner and the primary examiners is an appeal board of three examiners-in-chief. The pay being not glaringly insufficient and the position one of some dignity, its incumbents are usually men of ability and hold their places for long terms.

The remainder of the Patent Office employees, mainly clerical, number about 400. The entire working force is crowded into about one half of the available space in the so-called Patent Office building—the whole of which the inventors have paid for, as before stated—the rest being occupied by the Interior Department, of which, for some inscrutable reason, the Patent Office is a bureau. The quarters are so inadequate that the most valuable records of the office lie piled up on floors and in corridors, despite the lesson of two disastrous fires. The average floor space given to each employee is about seven feet square, no allowance being made for passage ways. Most of the occupied area is taken up by halls for the exhibition of old models, which are interesting chiefly to western bridal couples. The examinations of inventions relating to "dryers, farriery, metal-working tools, nut and bolt locks, pneumatics, refrigeration, and windmills" is accomplished by nine people, who, with all their records and furniture, are crammed into a room nineteen by twenty-three feet in dimensions. This is representative. Every commissioner for the last twelve years has appealed to Congress for remedy. The present commissioner calls the existing state of affairs "most deplorable." It is disgraceful; it not only impedes public business, but violates the plainest sanitary laws.

Such are the conditions of personnel and place. Now as to the examinations themselves. To keep up with the rate at which applications are filed—about 43,000 a year—each examiner ought to make every day about five "official actions," each requiring intelligent decision. This being impracticable, the delay in reaching an application after it is filed, though less now than it has been for years, varies from one to six months. To this is added more delay in considering amendments and arguments to meet objections. The patent is not retroactive, and the inventor stands helpless against piracies; for he has no protection during the interval. If, meanwhile, he seeks patents abroad, and gets them in advance of the officially-delayed United States patent, he thereby cuts down the lifetime of the latter so that it may expire with that of the foreign grant of shortest term.

It might be supposed that an inventor who should desire to determine for himself the novelty of an idea, could here find complete records for his assistance; or, inasmuch as to invest in a patent right without search into what has been done before is like buying real property with no examination of title, that the intending investor might here have at his disposal, digested and abridged, all prior patents and publications which the almost unlimited facilities of the government could secure for him. But no published abridgment or digest of the United States patents is in existence. Some years ago Congress was induced to appropriate \$10,000 toward making one. The money was expended as far as it would go, and the manuscript of a small fraction of the work now lies moldering in the vaults of the Patent Office. There is an inadequate library, not properly indexed, and for purposes of research but little better than the collection of patent records and scientific works in the Astor Library of New York. In place of the finest mechanical, chemical, and electrical laboratory in the land, provided with every means for demonstrating new inventions on a seale sufficient to prove their practicability if it should be questioned, there is a small basement room containing some dilapidated apparatus and a few bottles of the commonest reagents. The examiners have no means of independently testing inventions, and such few digests as they possess, mainly of their own making, are in constant use and not accessible to the public. The Patent Office publishes a weekly magazine called the "Official Gazette," which contains partial drawings and copies of the claims of the patents issued during the week. It is sold at a low subscription price, and is useful. The complete specifications and drawings of the patents are also printed weekly and may be purchased at ten cents each in quantities. The sale is about 4,000 copies a day, and the price charged is excessive.

The metes and bounds of an invention must be defined by the inventor. He must stake out his own claim. It is not the business of the Patent Office to do this for him. It can act solely upon his definition of what he has invented; and to that definition, whether adequate or not, the law ever after strictly holds Therefore the character of the patent, and the amount of protection that it secures, depend greatly upon the ability of the attorney who presents and prosecutes the application. Very little safeguard is provided for the inventor against professional incapacity or deceit. Any person of "good moral character" may practice before the Patent Office. He need not be a member of the bar. In order to prosecute an application, he must file a power of attorney, thus becoming the inventor's attorney in fact. There is no Patent Office bar. The act of July 4, 1884, authorizes the secretary of the interior to prescribe rules governing the recognition of agents, attorneys, and others representing claimants before his department; and he has, under that act, admitted persons to practice before other bureaus of the Interior Department. But the Patent Office has never been considered as coming within the purview of that law, for the reason that an application for a patent has not been regarded as a "claim" against the government. The only remedy against malfeasance by an attorney is the filing of charges and a trial before the commissioner, which may terminate in a withdrawal of further recognition. But this rarely happens.

Such are the conditions that attend the making of a United States patent. For this inefficient service the inventors, and not the tax-payers, be it repeated, pay \$1,250,000 yearly. Of that sum, one fifth is virtually confiscated, with no return whatever. The responsibility lies with Congress. Again and again efforts have been made in that body to apply the accumulated surplus to the uses of schools and public works. So far, the friends of the patent system have succeeded in preventing such improper diversion. How long they may be able to continue to do so is open to question, for the legislature has been deaf to all requests for the appropriation of the money toward improving the service for which it was paid. In the present Congress, when it was urged that this fund came from the inventors and rightfully should be devoted to their benefit, the answer was returned that "it is not less appropriated to-day as a part of the people's money because it originally came from taxation for patents instead of coming from direct taxation," and the Patent Office was stigmatized as a "clearing house for cranks." It seems premature to advocate specific measures of reform so long as Congress maintains its present position of apathy and ignorance. There is no lack of suggestions, extending from minor details all the way to complete reorganization of the Patent Office. A well-known advocate recently assured the writer that it was of doubtful expediency at the present time to press even the most urgent needs of the office upon the attention of Congress, lest a general attack on the whole patent law should be precipitated.

Whether this statement exaggerates the temper of Congress or not—and it is greatly to be hoped that it does—it certainly goes to support the belief that the root of the trouble lies in lack of popular information. The Patent Office has been of the greatest benefit to the country, and despite its defects it is so still. It cannot be brought to higher usefulness, and it is even doubtful whether its present condition of impaired efficiency can be maintained, without material, and probably radical, improvement. We want for its proper administration the best attainable scientific and legal talent, and plenty of it, sufficiently and reasonably paid, and intelligently directed. We want uniform and stable decisions and uniform practice. We want permanence in office,

and attorneys subject to proper restrictions and discipline. We want adequate facilities for research of every kind, and adequate room for work and storage. We want every possible safeguard against temptation, corruption, and fraud. We want the appropriation of the surplus revenue of the office to the purpose for which it was given. Most of all, the people should understand that the patent system is not an institution for the imposition of grinding monopolies. It protects the inventor in what is his by right of creation and discovery; and by the stimulus which it affords to invention, it cheapens the necessaries and increases the comforts and conveniences of life, augments their consumption, redistributes labor, calls forth higher orders of skill, and opens new avenues of employment. The protection of industries by patent approaches in economic importance the protection of industries by tariff.

On May 6, 1646, the General Court of Massachusetts, under the system of law called "The Body of Liberties," gave to Joseph Jenckes, of Lynn, the first patent ever granted in America. It was for a scythe, and he prayed for protection for "fowerteen yeeres, without disturbance by any others setting up the like inventions, so that his study and cost may not be in vayne or lost." Jenckes's scythe is in the hands of the farmer of to-day, and it cut all the grain of this country for many years. It did not open to the world the great granary of the West; that was the work of another patented invention—the reaper and mower. The inventor of that machine made the same prayer, and so did the inventors of all the 450,000 patented devices which appear on our national record. And the inventor of to-day asks—and surely his is the right to ask, for he pays for it—that we shall maintain in all its efficiency that system which is for him, as it was for his forefathers, the sole safeguard and security "that his study and cost may not be in vayne or lost."

PARK BENJAMIN.

## RAILWAYS UNDER GOVERNMENT CONTROL.

NATIONS, so far as their railway policies are concerned, may be classified in three groups: those in which the railways are the property of the state; those in which the roads, though not absolutely state property, are closely supervised by state officials and are organized almost as a department of the public service; and, lastly, those in which the railways are the property of private trading corporations. Of the first class, the two prominent examples on the continent of Europe are Germany and Belgium; but for Anglo-Saxon readers it is equally important to notice that the same system has been adopted by the English colonies in Australia. Of the second type, the leading instance is to be found in France. England and the United States stand alone in the third category. The first system relies for its motive force on governmental solicitude for the welfare of its subjects; the second on governmental interference, both as a stimulus and as a restraint; while the third places its trust in free competition. Free competition, in England three quarters of a century ago, did marvels in the development of traveling by coach on common roads, and when coaches gave place to railways there was no thought of adopting any other method. Such a system, however, obviously requires for its development two things—a large amount of available private capital, and energy and self-reliance in the capitalists to employ it. The latter requisite was wanting among the despotically-governed nations of the continent; the former among our sufficiently self-reliant kinsfolk in Australia.

The purpose of this paper is to trace the working of the different systems, but before doing this one or two preliminary points may well be noticed. In the first place, it would not be difficult to bring forward an array of facts to prove that the English people hardly realized what the power of the railways was likely to be when, in the latter years of the first half of this century, their Parliament authorized the incorporation of

private railway undertakings by the score and by the hundred. Had they realized this, it might be very plausibly argued, they would have made the railways a department of state, or at the very least would have subjected them from the beginning to a stringent state control. Certain it is that whenever the question of state purchase has been raised, the expense of the plan has always been one of the chief objections. This objection was taken to Mr. Gladstone's railway act of 1844, which, at a time when the railway capital had reached about £100,000,000, contemplated as a possibility a deferred purchase in twenty-one years' time. It was taken still more seriously when the twentyone years had elapsed and the capital had more than quadrupled. At the present time, when about £900,000,000 is invested in the British Isles, the question is apparently quite outside the range of practical politics. It is true that two or three years ago a wellknown railway contractor wrote a book to prove the necessity for state purchase, and that some of the extreme socialists have made the same theory a plank in their platform. It is true, too, that within the last few months a society has been started for this very end; but, if the reporters are to be believed, the audience at its last meeting numbered only fourteen persons; and, among the educated classes at least, that number probably represents with sufficient accuracy the society's following.

Another point must be noted. English railways, from the outset, have been subjected to no inconsiderable amount of state control. Practically speaking, it has always been impossible to make a new line without obtaining a special legislative act for the purpose, which act can be passed only after a judicial hearing before committees of both houses of Parliament, where any person injuriously affected has a right to appear in opposition. Similar authority has been necessary for the raising of fresh capital. As a result of this supervision, the debentures or bonds of an English company are almost absolute securities, while the amount of "water" in the ordinary stock is, on the whole, a very trifling percentage. In the working of the railways, too, the government has not hesitated to interfere, both in its judicial and in its executive capacity. The clauses in the inter-State commerce act prohibiting unjust discrimination and

undue preference, are practically modeled on an English act passed as long ago as 1853; and whether it is due to the action of the courts, or to the native virtue of the English freight managers, the fact is certain that in modern English railway history personal favoritism and secret rebates and concessions are things unheard of. Then, on the executive side, the Board of Trade, which is practically a ministry of commerce, has been given power to interfere in such questions as those of third-class accommodation, of workmen's trains in the neighborhood of London, and of safety appliances. The power actually to fix a rate, as is done by the State commissions in Georgia and Illinois, for instance, is a function that has never been intrusted to it. But in the railway and canal traffic act of 1888, Parliament went very near to this point. It empowered the Board of Trade to draw up a new uniform classification and a new schedule of maximum rates which should be binding on the companies; and the Board of Trade has so interpreted its instructions that, in not a few instances, it has fixed the new maxima below the rates which the companies are actually charging at the present moment. But this matter has not yet reached a final settlement.

Such, in very brief outline, is the English system. Speaking broadly, it may be said that the English people are satisfied with it and are not likely to change it. Nor, in the judgment of the present writer at least, would they find any reason to do so if every voter should have the opportunity to study the railway systems of all the other countries. Take Australia, for instance. Anglo-Saxon democracy has there made its most important experiment in state railways, for the government lines of the Cape are a small affair, while those of Canada cannot escape the controlling influence of American competition. It will not be denied that the Australian lines have suffered from political management. Railways have often been constructed, not because they have been needed, but because the member for the interested district has been pertinacious and insistent. Redundant officials by the hundred have been employed or retained in office for the same reason. In the last few years the different colonies, one after another, have found it expedient to appoint non-political boards of railway commissioners, holding office for life, to manage their railways. But of course it has been impossible to withdraw from the government and Parliament the power of the purse and the decision as to the construction of new lines. Nor can it be said that, either in the extension of new lines or in the facilities afforded by the existing ones, the Australian colonies have shown any development to match that of the railways of America. Railway rates may have come down, but they have not descended by leaps and bounds like those of the western American roads, and it may well be argued that the extraordinary development of the American West, as compared with the slow progress of agricultural settlement in Australia, is mainly due to the difference between the fiercely competitive system of the American lines and the more conservative methods of Australia.

The German evidence for or against government management can without difficulty be represented as proving anything that it is desired to prove. If we charge the obvious faults of the Prussian lines—their slowness, their stolidity, their overbearing treatment of smaller neighbors—upon the system of state ownership, we may be told in reply that these are but accidents, and that the essence of the system is to be found in its uniformity and in its certainty. Or, again, we may be assured that state ownership in Prussia is so new that its natural consequences have not yet had time to work themselves out. Messrs. Farrer and Foxwell, for instance, in their recent book on "Express Trains, English and Foreign," have pointed out that while, all over the world, speed and accommodation have been rapidly improving between 1875 and 1889, "the German government railways remain with the same speeds and the same accommodations as before. . . . As far as express trains are concerned, the acquisition of the private companies by the state has had an exceedingly bad effect." To this sweeping indictment, which was strongly backed up by influential German newspapers and apparently represented the prevailing German opinion, the German government has made a twofold reply. In its official publication, "Archiv für Eisenbahnwesen," it has attempted, not over-successfully, to deny the fact; and, what is more to the point, it has put on several new expresses of a high order of excellence.

The authors just quoted went further, and pointed out that,

poor as are the Prussian speeds, those on the railways of Saxony, Bavaria, and Würtemberg, which have always belonged to the state, are still less satisfactory, being indeed "deplorably bad" and "a disgrace to Europe." But to this further accusation it is easy to reply that the German government studies the greatest good of the greatest number, that express trains are mainly for the benefit of the richer class, and that a great deal has been done of late for the benefit of third-class and fourthclass passengers. Again, it is claimed that trade has been encouraged by the simplification and modification of the freight tariffs, and that the traders have been allowed, by means of the institution of consultative committees in the chief centers, a voice in the settlement of the rates which they have to pay. A charming system in theory, reply the individualists; but when your rate-modifying machinery takes a year or eighteen months to get to work, its practical benefits are by no means so great as on paper they might seem to be. This much, however, is clear: In Prussia, a country which is not governed on the party system, railways are not likely to be used for party purposes; but for all that, the policy of the railways is dictated quite as much by political as by purely business considerations. Traffic, for instance, is diverted by exceptional rates from Rotterdam and Antwerp, for the benefit of Bremen and Hamburg. The natural route between France on the one hand and Austria and south Germany on the other, which is through Alsace-Lorraine, is almost absolutely barred. Again, by fixing rates to the frontier on a much lower scale than those for the same articles from the frontier, what is practically a protective tariff is built up, and in this way the regulation of the fiscal policy of the country is withdrawn from the control of the German Parliament.

One other point. In backward and thinly-populated countries, such as Austria, Hungary, and Scandinavia, state-owned railways and those of private ownership may perhaps continue to exist side by side. In countries more commercially active this is practically impossible. France has been glad to hand over, on almost any terms, a considerable proportion of its state railways to the great companies which control the districts in which they are situated. In Belgium the process has gone the other way, and the

state has been forced to buy up all the seriously-competing lines. In Prussia the same process is very nearly complete, but one or two companies still hold out. If, however, the recent history of the Hessen-Ludwigsbahn and the Boxtel-Wesel should be written in full, it would be very necessary to find the German equivalent of the verb "to boycott."

We mentioned the state railways of France a few lines back; but state railways in France, needless to say, are only an afterthought and a small matter. The original French system, begun as long ago as 1842 and deliberately re-accepted as recently as 1884, is one by which France is partitioned among six great companies, each of which has its own district within which competition is prohibited. Five of these districts radiate from Paris like segments of a wheel; the sixth is in the South-west, within Bordeaux, Toulouse, and the Pyrenees. What the government has done for the French railways it is difficult to say in a few words. It would not, however, be very far wrong to say that it has provided between £150,000,000 and £200,000,000 sterling of capital, or between a quarter and a third of the whole, and that it guarantees to each of the companies interest on the capital provided by private investors, at a rate ranging from a minimum of seven to a maximum of 13½ per cent. Further, as has been said, it protects the railways against competition that might reduce their incomes, which are, as a rule, considerably larger even than the amount guaranteed. In return for these very substantial benefits, the state receives, in the first place, the right to the reversion of the companies' property about the middle of the next century, and, secondly, the theoretical right to fix the charges and to regulate the service. The right is theoretical rather than practical, for the reason that, owing to the extravagant amount of the guarantees, the minister dares not propose a reduction of rates or an increase of facilities. his action not infrequently is in the other direction. an instance in point: Some years ago the Western Railway of France, in conjunction with the Great Western Railway of England, established a new service between London and Paris, via Cherbourg and Weymouth. The service was first starved into inanition and then condemned to death; but the reason was

to be found, not in the backwardness of either company, but in the action of the French minister, who was unwilling that the Western line, which does not earn the full amount of its guarantee, should charge to the state the cost of building up this new route. Even when a company is earning more than its guarantee, the same considerations may, not improbably, apply. The Northern Railway of France, for instance, the most prosperous line in the country, proposed, it is said, not long since, to reduce the fares between France and England, via Boulogne and Calais, to the level of those charged over the western route by way of Dieppe. But the ministerial homologation was refused. Such a reduction would deplete the revenues of "l'Ouest," increasing the government guarantee, while the share-holders of le Nord would keep the extra profit for themselves.

The system, in fact, as between the railway companies and the state, is literally one of "heads, I win; tails, you lose." The government's legal right to fix every freight rate, and to settle the time table of every passenger train, is as unquestionable as is the expenditure of £200,000,000 to purchase this right; yet it would hardly be a paradox to argue that, practically, the powers of the Board of Trade in England, where the state has never risked one penny in the railways, and where railway companies make and alter schedules at their own sweet will, are more extensive than the nominally far more sweeping powers of the French minister. As for the results of the system, while it must be acknowledged that the French lines are managed with very great technical ability (the French engineering schools are probably the first in the world), it can hardly be denied that the accommodation provided for the public is very jealously limited. In the passenger service, the trains are few and far between, and each of them, on the main routes, is crowded to the last seat. In the freight traffic, consignments are kept back two, three, or four days, in order to secure the most profitable engine loads. Everywhere economy of working expenses is the main thing studied. Where a railway has a monopoly, especially in a rich old country with established industries, it is always less troublesome and risky—and probably almost as profitable in the end—to maintain high rates, to give scant facilities, and thus

to do a small business with a large percentage of profit, than it is to reduce rates, to increase facilities, and so to earn a larger gross income at a higher percentage of working cost.

Before leaving the French railways, let us notice one more point of considerable interest. As originally planned, the systems of the different companies were designed to meet one another in thinly-populated parts of the country, so that competition might be minimized. The two great companies, for instance, which radiate from Paris to the south and south-west—the Paris, Lyons, and Mediterranean Company, and the Orléans Company meet in the remote mountain districts of Auvergne. But in these very districts, Vichy, Royat, and La Bourboule have grown of late to be among the most important watering places of the world, and their traffic is yearly increasing in importance. Accordingly, spurred by the competition of the Orléans line, the Paris and Lyons gives to the rugged table lands of Auvergne a passenger service which, all things considered, is better than that which it gives to Lyons and Marseilles, and to all the important towns in the valley of the Rhone between them. So, too, with the Swiss and Italian traffic. To Switzerland, two companies—the Paris and Lyons, and the Eastern—compete; to Italy, since the opening of the St. Gothard tunnel, there has been fierce competition via the Rhineland railways. Toward these countries, therefore, the Paris and Lyons is upon its mettle. Says Mr. Farrer:

"The service is twelve hours quicker to Rome from Paris than before the Gothard line was opened. . . . The best express to Marseilles is actually slower (28 minutes) than seven years ago. . . . If the Marseilles express went at the same speed as the Italian train, it would reach Marseilles two hours quicker, and if it went at the pace of the London and North-western day Edinburgh express, five hours quicker."

To this it should be added that the North-western has much the harder course to travel, and that while its train conveys first-class, second-class, and third-class passengers, the Marseilles *rapide* is limited to first-class passengers only.

Competition, however, by no means stops short at the Italian frontier. Those who wish to know more as to the very interesting railway history of the Italian peninsula, will find an admirable summary in Professor Hadley's well-known book on "Rail-

road Transportation." Here it must suffice to say that, after experimenting with every possible system—state railways worked by the state; state railways worked by private companies, now at a fixed rent and again for a share of the profits; private railways, at one time as mere local roads, at another as great systems monopolizing large sections of the country—after trying all these, the Italian government put matters on a permanent basis, six years ago, in accordance with the best results of its practical experience. That basis was as follows: An act was passed by which all, or almost all, of the Italian railways were consolidated in the hands of two companies, which leased their lines from the state for a long term of years, and were left to work them for their own private interest. Each company has access to all the principal centers, such as Milan, Florence, Rome, and Naples; the one, the Adriatico, approaching from the east, the other, the Mediterraneo or Western, following the western coast. When Professor Hadley wrote, five years ago, it was possible only "to look with interest to see how far the event justifies the framers of the bill." To-day it may be pronounced without much hesitation that the result is a success. In spite of all difficulties; in spite of the grinding poverty, not only of the railways, but of the people whom they serve; the Italian lines are steadily, some might say rapidly, improving. Competition has got fairly under way, and in its bracing atmosphere the railway pulse is beginning to beat with something more like express speed. Perhaps the best testimony to the success of the Italian experiment is to be found in the fact that in Holland a similar plan has been quite recently adopted.

One other European country must be noted because of its special interest, in one particular, for American readers. Sweden, like America, has its great lakes, forming, with the aid of the Göta and Trolhäthan canals, a continuous chain of water communication across the country. Stockholm and Gothenburg stand to each other as do Chicago and New York, with Jönköping, Motala, and other towns en route taking the place, on a smaller scale, of Detroit, Buffalo, and the rest of the lake cities. In Sweden, too, the navigation is stopped by ice for some months every year. But here comes in the difference. The Swedish

railways are mainly government property, and it would hardly be dignified for the government to put its rates up or down according as the canals are closed or open. Nor, on the other hand, can it afford to carry all the year round at the price at which the canal boats can work. What happens, therefore, is that the railway rates are permanently maintained at the higher level. In Summer the railways are empty, and the iron ore and the lumber go by water; only in Winter are these products carried by the railways. That the public revenue suffers, is obvious, for, presumably, judging by American experience, some slight profit might be made, even at the canal rates, plus the extra amount that the freighters would be ready to pay for greater dispatch and certainty of delivery; and this profit, whatever it might be, would be available, pro tanto, to reduce the charges on the freight actually carried. Nor, it may also be presumed, would it be against the public interest that the canal carriers should be exposed to the competition of a different carrying agency.

In this sketch of the part taken by governments in the control of railway systems, very much, of course, has been left unsaid. Statements have been made which, to those familiar with the subject, may seem to need to be greatly qualified. writer, while endeavoring to be fair, must confess, as his readers will not now need to be told, that he is a convinced individualist; and it is of course possible that his prepossessions have colored his views of the facts. For this every reader must make allowance as he thinks proper. But a word or two of a general nature may perhaps be added here with advantage. In England, American railways are, as a rule, the object of almost unmixed laudation. We see their marvelous cheapness, their flexibility of adaptation to rapidly-changing circumstances, and the extraordinary technical ability with which they are managed. On the other hand, we pay little heed—perhaps because we have a difficulty in imagining them-to the personal preferences, the unjust discriminations, the wild fluctuations of rates, even the actual financial dishonesty, which look so large in the eyes of the American public, and have given to the agitation in favor of more stringent state control, or even of state ownership, whatever force It is worth noticing, therefore, that these blots on it possesses.

the American system have no necessary connection whatever with the system of private management. Rate wars are practically unknown in England. There has been but one in the last nineteen years, and that was between two petty local lines. As for personal discriminations, secret rebates, and the like, the Parliamentary committee on railway rates which sat in 1881 and 1882, and which took many hundreds of pages of evidence from scores of witnesses, most of them hostile to the railways, reported as follows:

"Your committee . . . acquit the railway companies of any grave dereliction of their duty to the public. It is remarkable that no witnesses have appeared to complain of 'preferences' given to individuals by railway companies as acts of private favor or partiality."

If railway officials and railway directors do take advantage of their positions for purposes of nefarious private gain, they are certainly not found out. The present writer cannot remember to have heard of such a case. State ownership, therefore, is not the only method of eradicating these evils.

There are, however, so-called preferences which are not personal, but local; apparent discriminations, that is, in favor of one place against another, such as gave rise to the passage of the famous "long and short haul clause." For these discriminations, founded as they are on the nature of things—and nature is stronger than any government, be it monarchical or be it republican—no state ownership can ever provide a remedy. In Mr. Grierson's book on "Railway Rates" will be found numberless instances in which continental governments are violating the provisions of the long and short haul clause by favoring the foreign exporter or importer above the local consumer. For instance, the rate on coal exported through Hamburg is sixpence per ton less than the local rate. Imported grain from Bremen to Cologne pays 12 shillings, while grain from a way station four miles out of Bremen pays 15 shillings and sixpence. In France, the special rates between Marseilles, Italy, and Switzerland, on the one side, and Havre, Calais, and Dunkirk, on the other, are a constant source of complaint from the representatives of towns along the route. Spanish wine, again, is carried from the frontier to Paris for four centimes, while Bordeaux wine, which goes only two thirds of the distance, has to pay six centimes. It is quite possible, indeed, that before long these rates will be withdrawn in deference to popular clamor; but that has in great measure happened in England already. The point is that the injury to the local trader, supposing it to be an injury—though all those who have studied the subject are unanimous that it is not—is inflicted just as readily by a government official as by the manager of an ordinary commercial railway.

So much for one side of the shield; now for the reverse. Themistocles, on a famous occasion, was awarded the prize for wisdom and conduct because each commander put down his own name first and that of the great Athenian second. Were the railway experts of the world polled in the same fashion, it can hardly be doubted that the railways of England and the United States would secure the first and second places between them. In speed and accommodation, in the energy which pushes railways into remote districts, and in the skill which creates a traffic where no traffic existed before, they stand to-day in the front rank, as they have stood for the last half century. To say that they are very far from perfect, is nothing; it is only to say that they are worked by human agency. Their worst enemies will scarcely deny that they are at least alive; so long as there is life there may be growth, and we may hope to see them outgrow the faults of their youth. The charge made against state railway systems is that they are incapable of vigorous life. old adage which proclaimed that "necessity is the mother of invention," has been restated of late years as the law of the survival of the fittest in the struggle for existence. If the doctrine is true, the state railway system, relieved from the necessity of struggle, must cease to be fit and will fail to survive. Our children will be able to judge whether the doctrine applies in this case or not, at least if the Anglo-Saxon race in England and America shall retain its hereditary belief in the virtues of private enterprise, and its traditional dislike to government interference.

W. M. ACWORTH.

## THE RING AND THE TRUST.

I CAME, the other day, in Hegel's "History of Philosophy," upon the following picturesque sentence: "Like Mercury, leader of souls, the idea is in truth the leader of nations and of the world." "The idea"; that is to say, reason, divine and omnipresent, which subdues matter no less than spirit to its final purposes. That sovereign idea it was which Emerson worshiped in his peculiar fashion as "the oversoul." According to the New England teacher, that spirit which is in all men, but which is better and higher than any man, has manifested itself in one chapter of the world's history as freedom, in another as light, in a third as beauty and the gift of artistic expression. And to day, if we seek its lineaments amid the dust and the smoke clouds flung out upon us by the never-resting wheels of machinery, by the bale fires and the great Moloch altars of "the industrial era," we may discern therein three things which are essentially one and the same; I mean science, federation, and fraternity. Science, which affords the indispensable physical basis; federation, in which are summed up the social means and instruments; and fraternity, which combines the beginning with the end, righteousness with love, and all men in that household of which God is the father and king.

Strange as these utterances may sound amid the race for wealth, and under the reign of "the almighty dollar," I believe them to be simply true. The prophets of God see farther than Wall Street does. In its economics it has omitted to reckon with "the Leader of nations and of the world," who is not minded that his work shall end here. He has other destinies in store for man, and he makes of commercial greed on one side, and of the misery thence ensuing on the other, the stepping stones on which we cross to a fresh order of things. By means of these portentous evils, and out of them, he intends the federation of labor and capital to emerge. Of late years his message to this effect has grown

perspieuous enough. But perhaps it is carved in such immense characters on the story of the times that most of us, taken up with mendacious telegrams in the newspapers from hour to hour, and gaping for frivolous details of court ceremonial or society gossip, have failed to decipher it. Let us endeavor, then, to render into plain speech the meaning stamped by Providence on certain modern phenomena which fill a great space in the eyes of the world just now.

We will take, as our beginning, the chapter of trade, crammed with experience as well as with prophecy of a most remarkable sort, entitled "The Ring and the Trust." It is, let us say at once, the open door out of the old political economy into the new. As all the world knows, Adam Smith and his successors, when they bore down victoriously on the mercantile system, as it was called, and swept most of it into limbo, established, as the first and fundamental dogma of their creed, complete "freedom of contract." There was to be freedom in production, in exchange, and in consumption. "Buy in the cheapest and sell in the dearest market" became a governing axiom invested with such religious reverence as had never been paid to the Ten Commandments. Competition was declared proverbially to be "the life of trade." By means of the magic formula "supply and demand," as by some automatic process, it was believed that the due social equilibrium, "the greatest happiness of the greatest number," would now be set up. Individuals, acting from "enlightened self-interest"—whether laborers or capitalists did not signify--would take care of themselves; and the function of government was not any more to govern, but only to keep the peace and to enforce the fulfillment of contracts which had been willingly entered into by grown men and women. Universal free trade, within and without the country, was a logical deduction from these principles. So was the liberty of adulteration, as Mr. John Bright argued, on the ground that if people wanted sound commodities they would see that they got them, and that they did not require "grandmotherly legislation." So was the long and bitter struggle, on the part of English millowners and mining lords, against the factory acts. And so, to take one of the latest instances, was Mr. Herbert Spencer's loud outburst in denunciation of "the coming slavery," which we may read in his volume on "The Man and the State." If competition is the all-sufficing principle on which true political economy is founded, to introduce another, and that the very opposite, in the shape of combination, must be as subversive of national prosperity as it is contrary to science.

The doctrine thus formulated by the Smithians is now known under the mischievous-looking name of "anarchy," which does not, in economic treatises, mean disorder and revolution, but the upholding of spontaneous, or purely unconscious, methods of adjusting the various interests of the individuals composing a society, in opposition to conscious efforts, especially when directed by the state, toward organizing labor and capital or production and distribution. It is hardly requisite to observe that complete anarchy has never existed, even in modern times. Nevertheless, it has so far prevailed as to make trade unions seem to wellmeaning persons not only illegal—which they were at first but wicked conspiracies for the ruin of employers, and the enslaving of helpless workingmen, who, as it was argued, surrendered their natural independence in joining them. Oddly enough, at the very moment that laborers' unions were thus frowned upon, joint-stock companies were piously encouraged, and good men, the trustees of churches and chapels, took shares in them and sat on the boards of directors; their consciences not being troubled by this species of combination, although they wept over the perversity of artisans who united to protect the only capital which they might call their own, namely, their labor and wages.

These excellent men had an answer to objections, of course, and they were not slow to give it. In joining himself to other capitalists, a proprietor, they would say, is but exhibiting his freedom of contract. He is pursuing his own advantage while benefiting others, and can draw out if he dislikes the terms. Whereas, trade-unionism is slavery; it takes from its victims the right to compete in the labor market on their own conditions, and obliges them to refuse employment—in strikes, for instance—when they would fain accept it and earn a little bread for themselves and their families. There is every reason, then, why the state should enforce joint-stock contracts thus

willingly made, and why it should put down communations of workmen with a strong hand. In both cases, freedom is the end and the justification of the law.

Very well; but suppose "freedom," thus conceived of, should defeat its own purpose, as regards both capital and labor, what then? Freedom of contract means, by force of terms, freedom not to contract, or else we are landed in the famous "Hobson's choice," and must ride to market on the steed which that inexorable job master shall provide for us. Now, unrestricted competition among workmen, where it was not checked by trade unions, or by the action of certain laws and customs, did result in a state of things precisely the opposite of freedom. We may learn so much from the frightful evidence regarding child labor and female labor, which is to be found in English blue books, from times preceding the factory acts down to the other day, when the report of the House of Lords on the sweating system was published. However, I do not purpose to enlarge on this part of the subject now. For "the communism of capital "-to quote Mr. Cleveland's happy phrase-will instruct us better still in the true and effective meaning of "freedom of contract," as it has been scientifically developed in our time. Capitalism, in fact, is now aware that "the natural confederacy of employers," which has never prevented internecine struggles among them, ought to be carried up to a higher stage, where it may become a conscious well-regulated union of interests, or a solid combination of those who hold commodities over against the public which consumes them. Free trade and open competition are to be abolished in favor of the body of monopolists who decide in what quantities a given article shall be produced and at what price it shall be sold. It is needless to observe that no distinction is made between the prime necessaries and the luxuries of existence in such calculations, save only that, as necessity has no law, the profit to be gained on things indispensable is much more certain than that which accrues on superfluities. A "ring" has for its express purpose "to keep up prices, to augment profits, to eliminate useless labor, to diminish risk, and to control the output." A "trust," which is defined to be "a joint-stock company of corporations," effects the same end

by placing all powers in the hands of trustees, differentiating the stockholders, who were hitherto supposed to control their own business, from the board of management, which now becomes their paymaster. The capitalist, pure and simple, is thus developed into a mere receiver of dividends. He splits off, so to speak, from the manager, who is the real captain of industry, and who takes a stipend or wages like any other workingman. The number of hands required is greatly diminished, and internal free trade, so far as these monopolies extend, is annihilated.

The individual, be he workman, small capitalist, or consumer, has begun to feel that he cannot stand against the energy and relentless methods of the ring and the trust. Combination is found to be a mightier principle in the economic game than competition. As well oppose handicraft to machinery, as set up the scattered efforts of individuals, with their limited resources and consequent lack of staying power, against the trust. The trust is able to control every avenue of transportation, to undersell its rivals, and to hinder them from receiving supplies and from loading or unloading the goods they may have in hand. Under the decried commercial régime of the middle ages, prices and qualities were fixed, in a rude way doubtless, by the whole community, acting through its rulers. When the ring and the trust have spread like a network over the land—as in regard to some commodities they have done already—prices and qualities will be determined, not by the people, who can but wait with oriental submissiveness till the flat has gone forth, but by syndicates representing shareholders. A small oligarchy of wealth, at the summit of which sit enthroned the great railway kings and their satellites, will have thus put the free American democracy under its feet. Free? Certainly; free to vote for the candidates sent to Congress by the omnipotent "trustees," whose commercial mandates will there be converted into law. To speak as the signs warrant, in that day the dominion of the whole country, of its resources in land, labor, and machinery, will have passed into the hands of stock-jobbers; and to the sixty odd millions who have no opportunity of dealing in shares will be left a political franchise to mock them with delusive hopes. The American Constitution, of which they have been so proud, will

thus have become merely an instrument in the hands of syndicates to consecrate plunder and to perpetuate economic serfdom.

Yes: but in the face even of these gigantic monopolies, while the world's commerce is being swept into the capitalist's net, and while public property, except in the form of taxation, threatens. in America and elsewhere, to become a tradition of the past, it remains true, as Hegel said, that reason governs the nations and the world. You cannot put back the hand on the clock. All mankind are drawing together into a confederacy which may be checked or thwarted, but which has already united Europe and America and the Isles of the Sea into a Hanseatic league, vexatiously disturbed from time to time by tariff disputes, yet forming one great republic of commerce. Capital has no country; it is unpatriotic and cosmopolitan. And whereas formerly it held by the Ishmael principle of every man's hand against his fellows, it now finds that it is a good deal cheaper to buy up competitors than to eat them up. We may trace the development of great industries, of the houses of universal provision, and of trusts of the first magnitude, by the failures. bankruptcies, and suicides of smaller men to which they have led. But the system, though utterly without compassion, looks rather to the absorption of such than to their ruin as individuals. The more fortunate of them exchange the function of entrepreneurs at their own risk, for that of employees. It is true that in so doing they fall under the general law of competition which still weighs so heavily upon labor, and that many of them swell the ranks of the unemployed: but production undoubtedly gains by eliminating the waste, extravagance, and miscalculation which always accompany individualistic trade and manufacture. Free competition has in this manner vielded, so far as the production of wealth is concerned, to corporate activities directed from a single center. The larger a business becomes, the easier it is to manage. But now the all-important question looms upon us: For whose advantage shall it be managed; for that of the dividend-receiver, or for that of the public? In other words, Shall society as a whole obtain the benefit of scientific advance and of simplification of the methods of production and distribution: or shall that benefit go into the pocket of a class,

comparatively small in number, and in no wise bound to return one atom of economic or social good to the millions from whom they exact this mighty tribute? Shall the community step into the place of the shareholders? Instead of monopoly, shall there be a fair and equitable control of means and products, exercised by the whole political organism? Otherwise, in the course of not many years, that organism will find itself only nominally independent, and, as regards its subsistence and its comfort, subject to a measureless despotism. At present not a can of oil or a pound of anthracite coal can be purchased throughout the United States except on conditions laid down by a handful of individuals, to whom the well-being of society is of no account whatever. Their sole aim and purpose is to enrich themselves. That may be on their part enlightened self-interest; but where is the corresponding enlightenment in a public which allows the bounty of nature and the labor of the real producers to be made a prey of, without regard for justice, civilization, or even freedom of contract? If a religious corporation should have such overweening "rights," it would be speedily told, and with reason, that they were a menace to the community. Is the situation improved by our knowledge that the trusts and the barons do not profess to be guided either by religion or by morality when they fix their prices?

Whether willingly or not, we have then, in a number of instances, arrived at a state of things radically opposed to the Utopias of the old political economists. They believed that competition would make monopolies forever impossible, and the monopolies are making an end of competition. Among the worst evils of the Days of Terror was reckoned the maximum that was decreed by the Committee of Public Safety as a standard of price. And here is another maximum, quite as arbitrary, but established by a committee of "the mutual benefit association," for the object of enhancing their own profits. What though it stints the bread and the meat and the coal of workingmen and their families in the hard Winter! Out of their necessity the larger gains are made. Once more, "to restrain trade" was a purpose scarcely avowed even by the English Parliament in dealing with Irish manufactures during the eighteenth

century; but such is now the modest proposal that the ring and the trust admit and act upon, as testified by smokeless chimneys and the thousands of dollars paid to various mill proprietors on condition that they shall not produce. When workingmen ask for an eight-hour day, they are told it will be the ruin of industry, and that they must be more tender of their own welfare than to insist upon it. But when the communism of capital cuts down work to half time and leaves machinery idle in order "to discourage new men from starting," the course is justified because such tactics destroy competition. Assuredly they do; and they destroy the fundamental suppositions on which modern society has accepted the doctrines of Adam Smith. Here is political economy, like Lord Castlereagh, "turning its back on itself" with a witness! If there must be a despotism, had we not better submit to that of the community at large than to that of a mutual benefit association?

As exhibited in this stage of his growth, the capitalist, I have said, may be regarded in a twofold aspect. He receives dividends, which act is often facetiously termed "earning" them, and he may or may not exercise a degree of superintendence over the business from which they accrue. So far as he does any work, he obviously has a righteous claim to payment. How, let me ask, so far as he does no work at all? Is it not equally obvious that ex nihilo nihil fit, and that he has no right to any payment? I shall be glad to hear what can be urged in arrest of this conclusion. At all events, if we could separate the function, and therefore the wages, of superintendence, from this other obscure and disputable one of the non-working, dividendenjoying monopolist, we might see our way to distinguish between the just rewards of each. Now the development of the trust has bestowed this unexpected benefit on the world. When it shall have gone on to its inevitable issue, the absorption of all private business that cannot stand against it, we shall hold a catalogue of "the sleeping partners of industry," and we shall know to whom the taxes of labor are in fact paid over. They, as will then be apparent, are the kings of democracy by divine right, irresponsible persons who enjoy the supplies which are not voted, but which are given, year in and year out, to keep them

above the changes and chances of fortune. How do they expend their civil list? According to their good pleasure. They are under no obligation to return one stiver to the public which feeds, and, I had almost said, which creates them. Such is the American view of private property. Not indeed that Americans are not among the most generous and free-handed people of the universe. But when the state has taxed them, it is argued, what more does it want? And are not the taxes themselves an embarrassment, overflowing the treasury, and wetting with golden spray all manner of quaint and ill-ascertained pensioners? If the single tax should be voted to-morrow, and should turn out to be more profitable than its most sanguine advocate believes, would it accomplish what the surplus which staggers economists cannot do now; to wit, relieve distressed labor? Let the monopolists enjoy their winnings, I hear it said, since no one else would be likely to get good of them if they were appropriated by the government.

There is force in these reasonings, which tells against Mr. Henry George's scheme, and against every other that contemplates only taxation as the remedy for our deep-seated evils, and does not go on to the organization of industry on a public basis. But they open a larger question than that of the single tax. Capitalism and democracy cannot live together. One of these two must go down. A sham democracy may, indeed, continue to exist, in which the multitude serve tables and the stockholders devour what is set upon them. Yet the republic in which every fresh aggregation of capital is followed by an increase of the "unemployed" till they mount up to millions, has no very palpable advantage over the effete and monarchy-ridden states of Europe. It is just as great a crime against the Declaration of Independence to be monopoly-ridden as it is to be monarchyridden. If kings are superfluous, why do certain omnipotent individuals command the approaches to New York and poll its inhabitants day by day, as they buy their railway tickets? Must kings be labeled with the old names, to prove that they exert the old kind of power? Political freedom which leaves nine men out of ten without house or home, and which cannot prevent machinery and artificial prices from creating a mass of vagrants

and loafers even in America, has clearly mistaken the shadow for the substance. And democracy, if it means to be a real transition from bad to better, must examine anew the title deeds to its inheritance, which were so magnificently drawn. It must learn, ere it be too late, how much of its property has been thoughtlessly squandered and signed away to private and irresponsible corporations. For monopolistic right is national wrong.

But, I shall be told, you cannot regulate industry on a public foundation in a day. Where are the organs, the functionaries, equal to such a task? Where is the political honesty, the sincere and large-minded patriotism, without which a resumption of state rights would issue in peculation and jobbery? My answer is that if democratic institutions cannot develop such men and such qualities, they are doomed by inherent worthlessness to corruption and decay. But they can and will; for the social problem, which is, at bottom, that of transforming slaves—by whatever name called—into free and independent citizens, has arrived at its present stage under divine guidance. We are not to lapse through capitalism into the lower conditions from which we have escaped, but are to pass onward to federation as the crowning task of democracy. Federation between all who work with head or hand, as against all non-workers who take their idle existence for the coping stone of civilization! When a class, how exalted soever, performs no useful office in society, its hour has struck. The dividend-receiver is falling into that abyss. As we have seen, not only does he not produce anything, but he has actually begun to monopolize trade, and deliberately to increase the number of starving citizens, by the process—from a scientific point of view justifiable—of extending power machinery and displacing manual labor. In a less anarchical state than ours, when labor should be released in one department it would be transferred without loss of time to another; and increased production would mean a higher degree of comfort for everybody. It now invariably brings with it suffering, pauperism, and a raised "margin of misery." To ascribe these paradoxical and inhuman results to capitalism, which absorbs not only the increase of production but the wages hitherto required for the sustenance of the workers, is plainly reasonable. More and more commodities

exist, but the unemployed do not get them; and although the consumer may in some instances give less for what he purchases than formerly, we know well that a vast and ever-growing profit fills to bursting the coffers of those who own the land and machinery and control the labor. If one scale sinks and the other kicks the beam, it needs no subtle reasoning to prove that there is a misadjustment in the social balance, or to show how it is brought about. Neither is the way to cure it doubtful. In the place of individualistic rings and trusts, we must put the commonwealth. That is the national trust, intended by reasoned action to balance inequalities, to restore and to maintain justice, and to prevent the greed of private citizens from appropriating to themselves those things which, by the nature of the case, never can be or ought to be their absolute property. Under due conditions a man may own a plot of land or use the water power of a stream, so long as he recognizes that the land and the stream belong, in the first instance, to that community of which he is a member; but when some few men arrogate to themselves the benefits of every stream and of the whole land, leaving, so far as in them lies, nothing but a bare subsistence wage to the intellectual and the manual proletariat who give these things their present worth, it is high time that society should bestir itself and ask on what rights these formidable claims are grounded. Rights of man or of nature they certainly are not. They run counter to the very notion of a free democracy, although urged in its name. And the admission of them has proved, within the last sixteen years, that they are fatal to the hopes, which civilized mankind has obstinately cherished, that America, which has discarded feudal institutions, would never see in her midst a worse than feudal misery. A true republic, if it purposes that every citizen who is industrious and moral shall have his due share of the plenteous rewards which Providence holds out to him, will assert its sovereign claim to the control of its own resources. This alone will secure selfgovernment; and without it there can exist no democracy worthy of the name, but a mere economic welter, presided over by place-hunters, and yielding tribute to the legalized marauders of the money market.

Let the democracy, therefore, employ its surplus in buying

back, at a just value, the rights which monopolistic companies have been allowed to appropriate, and let it restore to the nation its roads, telegraphs, and railways. Let it become so great an employer of labor and merchant of commodities as to trim the balance, now fallen all to one side, between these semi-feudal, self-interested trusts, which constitute a real imperium in imperio, and the otherwise defenseless and exploited public. The mistake in former legislation is now gross and palpable. It was simply an immense post obit, the resource of a spendthrift too green and inexperienced to calculate the future value of his estate. He is rich enough to give compensation for recovering what belongs to him, although he will be exceedingly foolish if he accept the estimate of the worthy usurers who have lent him out of his own pocket. However, individuals need not suffer even seeming wrong; but neither should the nation which toils and produces allow itself to be defrauded any longer. By a wise gradual substitution of the democracy for superfluous kings and trustees, public property will be once more turned to its lawful uses; the mere subsistence wage will be raised to a human level; machinery, while increasing the product, will not diminish the reward of labor; and, as Shakespeare says, "the man shall have his mare again, and all shall go well." At any rate, the truths are now being driven home, as with steam power, that combination has taken, and will take more and more, the place of anarchical competition; and that if the state does not exercise it in the name and for the benefit of the whole people, developing such organs as are necessary, we may expect the return of a robber period, in which pig iron shall stand for chivalrous steel and coal pits for castles on the Rhine. In those rude old days the evolution of the centralized king put down the noble highwaymen who said "Stand and deliver" to labor and capital. Now, as I foresee the popular state, when it shall have grown self-conscious, will pay off the shareholders and absorb, for the common good, the ring and the trust.

WILLIAM BARRY.

### RUSSIA'S TREATMENT OF JEWISH SUBJECTS.

THE consensus of opinion among thinking and reading persons to-day, as to the condition of the Jews of Russia, is exceedingly unfavorable to the Russian government. We have heard from so many sources of the ill treatment, the oppression, even the malignant cruelty, endured by this unfortunate people, that the general impression is against Russia. At the same time, there is no lack of contrary statement. From time to time, persons in high place—even the minister of the United States to Russia—have so told the story that people of judicial temperament will be apt to ask for more light. The poor wretches whom we see escaping to this country are naturally filled with their own woes, and are apt to give an exaggerated picture of what they have suffered, perhaps without any clear idea of the exact causes which have led to the evils they complain of. That they have suffered terribly is very plain. Before attempting any picture of the exact condition of affairs in Russia, so far as it concerns this question, let us suppose the Jews of our own community to be subjected to the legal restrictions which now obtain in Russia. Our laws on the subject would then read somewhat as follows:

All Jews born in the United States shall be regarded as aliens. No Jews shall dwell in any part of the United States except the States of Virginia, North Carolina, South Carolina, Georgia, Alabama, and Mississippi, unless they are graduates of some State university, members of a learned profession, skilled artisans holding certificates from a technical school, or members of a chamber of commerce who pay \$500 a year for that privilege. No Jew shall hold any government or municipal office. No Jew shall buy or rent landed property. All Jews shall pay special taxes in connection with religious services. Synagogues must not be opened without the permission of the president of the United States, and public prayers must not be held by Jews in any other place than a synagogue. When more than ten Jews wish to meet for consultation or discussion, they must obtain permission from the municipal authorities. Married Jews who become converted to Christianity are ipso facto divorced on conversion; but the wife, if she remain a Jewess, must not marry again. All Jews attaining the

age of twenty years shall serve five years in the active army and thirteen years in the reserve; but no Jew can become an officer, or even an officer's servant. No Jew shall serve in the navy.

Such a condition of affairs as is implied in this paraphrase of the Russian laws affecting Jews is so impossible, so inconceivable, in this country and to us, that we can scarcely imagine it to exist anywhere. And yet there is no exaggeration in such a paraphrase. The Jew to-day in Russia is hedged around by restrictions as whimsical and as offensive as any devised by the fanatics of the middle ages, and they are carried out with a brutality which is possible only in a half-civilized country. Jews are both heretics and aliens in Russian eyes. They do not belong to the orthodox church, therefore they are "foreigners"; and they are so styled in the law books, though their ancestors may have been settled in the districts where they reside for centuries before Russia had anything to do with them. The Russian Jews are regarded as an inheritance from Poland, and are kept confined mainly within the limits of old Poland, where they first came within the Russian grip. Besides Poland proper, there are eight provinces of western Russia-Vilna, Kovno, Vitebsk, Grodno, Minsk, Mohilev, Volhynia, and Podoliawhich formerly belonged to Poland. Jews are found also in three provinces of Little Russia-Kiev, Tchernigov, and Poltava—and in four divisions of southern Russia—Ekaterinoslav, Taurida, Kherson, and Bessarabia. Old Poland and the provinces named form "the Jewish Pale of Settlement," within which the ordinary Russian Jew must live and die. This restriction, according to some expert observers, is the fount and origin of all the ills that assail the Russian Jews. It cramps all their industrial and commercial energy, and marks them out as a pariah caste set apart for degrading treatment. The only other Russian subjects similarly hampered are discharged criminals.

On May 3, 1882, at the instigation of General Ignatieff, the Czar signed the now notorious "May laws," which are important enough to be quoted here. They are as follows:

<sup>&</sup>quot;The Committee of Ministers, having heard the report of the Minister of the Interior on the execution of the temporary orders concerning the Jews, resolves:

"1. As a temporary measure, and until a general revision shall have been made of the laws concerning the Jews, to forbid the Jews henceforth to settle outside the towns and villages; the only exceptions being in Jewish colonies that have existed before, whose inhabitants are agriculturists. 2. To suspend temporarily the completion of instruments of purchase of real property and the execution of mortgages in the name of Jews, also the registration of Jews as lessees of landed estates situated outside the precincts of towns and villages, and also the issue of powers of attorney to enable Jews to manage and dispose of such property. 3. To forbid Jews to carry on business on Sundays and on the principal Christian holidays, and to extend to Jews the present laws requiring that places of business shall be closed on such days. 4. To restrict the measures announced in paragraphs 1, 2, and 3 to governments within the Pale of Jewish Settlement."

The effect of these laws has been tremendous and far-reaching. They have resulted in a state of affairs which, according to a recent declaration of the chief rabbi of England, compels the Russian Jew to choose between apostasy and suicide. Hitherto the Jews, if prevented from going beyond the Pale, could move from town to village and from village to village within the Pale. If this should be stopped, they would, in process of time, all be confined to the towns. The second clause restricts the Jews still more closely to the towns; for if they may not acquire land by purchase, mortgage, or lease, or have anything to do with landed property, their country life must come to an end. But Ignatieff could not fully carry his schemes into effect. The indignation of Europe over his persecution of the Jews led to his disappearance and to the virtual temporary abrogation of these laws. But the laws remained on the Russian statute book, and needed only a revival of anti-Semitic feeling among the Russian rulers to be brought into operation. This came with the increased power of Pobiedonostzeff, procurator of the Holy Synod since 1880, whose influence on the mind of his former pupil, the present Czar, has turned Russia against all dissenters from the orthodox church -not only against the Jews, but against the Lutherans and the Roman Catholics. Against the Jews it was not necessary to introduce new measures. The May laws were in existence, and the interpretation given to them by the Senate, the highest court of appeal, became more and more stringent. The avowed object of enforcing them was to clear the Jews from the open country; and they were harried from the villages into the towns, the removal causing impoverishment in many cases. For instance, within little more than eighteen months the Jewish population of the town of Tehernigov was increased, already overcrowded as it was, from 5,000 to 20,000 persons.

Last Winter the governors-general of the different provinces were notified that it was proposed to advise the Czar to adopt new measures having for their objects the extension of the May laws and the addition of new edicts emphasizing the old restrictions and disqualifications. Some of the persons to whom this new scheme was submitted sent copies to Europe, and such was the outery made in the European press, the London "Times" taking the lead, that the Russian ambassadors hastened to assure the world that no new enactments had been passed and that no fresh edicts against the Jews were intended. Nevertheless, the laws already in existence proved to be quite sufficient to enable the government to carry out the Ignatieff scheme; for the interpretation of these laws was in the hands of government representatives, and they could be made to mean everything or nothing. Every effort was directed to make of no effect the law that exempted certain classes of Jews from imprisonment in the Pale. The meaning, for instance, of the word "artisan" was very much restricted; and many Jews, such as skilled bakers, butchers, glaziers, and even printers, were sent back to the Pale upon the ground that they did not come under that definition. Professional men being also exempt, it became necessary to find some way of limiting the number of Jewish graduates from the universities—a number which has always been very large in comparison to the Jewish population. Three years ago a rescript was issued limiting the proportion of Jewish scholars at universities and gymnasia to ten per cent. in the Pale, to five per cent. outside of it, and to three per cent. at Moscow and St. Petersburg. At first sight, this does not seem very unfair, considering the small proportion of Jews in the whole population; but the universities and the higher schools are in the towns, and here the proportion of Jews is very much greater. In 82 towns it is more than 50 per cent., and in four it exceeds 80 per cent. These statistics, too, were obtained in 1884, before the May laws had driven so many more Jews into the towns. For instance, at the University of Odessa the Jews are allowed to form only five per cent. of the students, while there are 106,000 of that creed in the total population of 240,000. Even where schools have been established by the munificence of opulent Jews, the proportion of Jewish scholars is still rigidly kept down. Thus, at Vinitza, in Podolia, a technical school was recently opened at the expense of the late Mr. Weinstein, a member of the Jewish community there. Notwithstanding the facts that the Jews form nearly half of the population and that the school was founded by a Jew, only eight scholars of that creed were admitted, while eighty Christian lads were granted the privilege.

Besides closing the professions to Jews in this way, by limiting the number of those who can obtain the necessary education, the Russian government has lessened the opportunities of those favored ones who are among the tenth admitted to the higher educational establishments. Recent regulations provide that no Jew shall be an army surgeon; and the only college for veterinary surgeons, that at Charkof, has been closed to Jews. Jews cannot be engineers; they are excluded from the civil service and from all public offices. The profession of advocate, in which the Jews have had great success, is now closed to all of the race who cannot obtain a permit from the minister of justice. The Russian law says in effect: "Some of you Jews may study law, but you must not practise at the bar; you may study engineering, but you can never be engineers."

According to recent estimates made by experts, the number of Russian Jews dislodged by the enforcement of the May laws from villages inside the Pale is 500,000, the number of artisans driven from homes outside the Pale is 200,000, and the number dislodged from commercial towns outside the Pale is 500,000; making a total of 1,200,000. Even if we reduce this number to 1,000,000, this is an enormous mass of people to be thrown suddenly on their own resources, in strange places already overburdened with men of their own callings. Already the misery produced by the congestion is appalling. Jews have always been among the poorest classes of Russians, owing to their large families and heavy taxes, the tax of a Jew being reckoned at half as much again as that of a Russian Christian dissenter. But the policy

of restricting Jews to the towns has made matters incomparably worse. There are said to be 25,000 Jewish paupers in Berdichev, the Russian Jerusalem, and throughout the Pale thousands of families have only one meal a day. No wonder that those who find refuge in our country prefer what appears to us to be a miserable existence to such extremity of poverty. Jewish philanthropists in England, who have taken pity on some of the victims of the sweating system, and have offered to send them back to Russia, have been met by the assurance that, wretched as is their life in London, it is luxury compared with their fate in the Russian ghetti. A few days ago a Jewish physician of some intelligence, whose diploma had been withdrawn from him upon the ground that he was too full of sympathy for some poor wretches suspected of nihilism, assured me that the Russian Jews who have reached the United States feel like singing hymns of thanksgiving. Since his arrival in this country, a few weeks ago, this physician has been visiting the tenement houses and workshops of the east side of New York City, in order to gain some notion of the life of his fellow countrymen here. "Their condition may seem miserable to you," he said, "but it is paradise compared to the horrors from which they have escaped." When one realizes that, in the vast area east of the Bowery populated by Russian Jews, the crowding, the filth, the noise, and the stenches are beyond description, and that the majority of these people work from fourteen to eighteen hours a day, often beginning their labor at dawn and continuing it until they fall exhausted upon the piles of clothing that they make for the cheap shops, he can see that the fate of the Russian Jew who has to stay in Russia must be hard indeed. The confinement to towns is beginning to tell terribly on the vitality of the Russian Jews, who alone, of all their co-religionists, fail to show vital statistics superior to those of their neighbors. Medical men used to credit the Jews with immunity from phthisis; but of recent years the proportion of recruits rejected from the Russian army for this disease, which cannot be feigned, has been six and a half per cent. for Jews, as against one half of one per cent. for others. For other diseases and for feeble constitutions, no less than 61.7 per cent. of the Jewish recruits were rejected, as against

27.2 per cent. of the ordinary Russians. Translated into plain English, this means that the persecution is a persecution to death.

In a smuch as Russia is afflicted with a set of public officers characterized, from the smallest to the greatest, by a corruption and rapacity of which we in this country know nothing, it is not surprising that the Russian Jew is regarded as the legitimate prey of this class. He is virtually turned over to be exploited. The government subjects the Jew to a number of special taxes, and the government's servants make sure that the uttermost farthing is paid. For instance, the state levies a tax on every animal and every bird that is slaughtered for food according to the rites of the Jewish religion; a percentage on the profits of factories, breweries, industrial establishments, and other trade enterprises carried on by Jews; a percentage on property bequeathed by Jews; a tax on apparel specially worn by Jews; and other small taxes too numerous to be mentioned here.

The principal grounds upon which the Russian justifies the persecution of his Hebrew brother are as follows. He asserts, 1, that the Jews are too rapacious, and too successful in getting money and property away from the surrounding Christians; 2, that they hold themselves, as a class, apart from the rest of the community; 3, that they furnish many of the leading nihilists and mischief-makers; 4, that they evade service in the army and do not become patriotic Russians. The first accusation may be ignored, as it amounts simply to saying that the Jew is shrewder and more intelligent than his neighbors of other races. As to the Jew's refusal to mingle more freely with his neighbors of different creeds, or, in other words, to assimilate with the population, it cannot be said that he has as yet received any very warm invitation to do anything of the kind. He has been chased like a beast of prey for centuries, and now he is asked why he does not like his persecutors. The charge of nihilism is perhaps true, to the extent that the Jews naturally furnish their proportionate quota to the malcontents who have the courage to act; but that the Jews among the nihilists exceed their proper proportion to the whole population, is denied by many trustworthy writers. The charge that the Jew evades army service is disproved by official statistics. In addition to these charges

it is said that the Jew of to-day is apt to be arrogant; and in this connection may be cited some of the petty regulations recently introduced in Odessa for the greater humiliation of the race. For instance, a Jew of the peasant class must take off his hat to every Russian officer he meets. In the street cars hangs, or did hang until recently, a sign saving that whenever a Russian officer enters a crowded car occupied partly by Jews, one of the Jews must resign his seat. In other parts of Russia there have been restrictions such as that at a certain hour all Jews must leave the public parks, and that they must not frequent public libraries except within prescribed hours. It is charged against the Jews that they will take advantage of every privilege. wretches have had so few in the past that it is not surprising that they make the most of those that they have. People who wonder at the occasional obtrusiveness of the uneducated Jew, do not reflect that this is perhaps nothing more than a natural reaction from centuries of oppression. The Jew has been held down; give him freedom and there is a rebound. After all, is there any more to be said against the unpleasant Jew than against the unpleasant, uneducated person of any other creed? I do not think that any one who has looked into the Jewish question will accuse the Russian Jew of any lack of patriotism. In every Jewish synagogue in Russia is offered up a prayer for the prosperity of the nation and the happiness of the Czar, and the love of country shown by these Russian refugees is surprising to less patient people, like ourselves.

The number of Jews in Russia is estimated by the most competent experts at between 5,000,000 and 6,000,000. The present rate of emigration, notwithstanding that no passport is given to families desiring to leave the country, has reached the high figure of more than 50,000 a year. One might ask why every Jew does not abandon the country; but of course there are millions of them who can barely find food, the old people wish to die where their ancestors have lived, and people who have homes and property cannot sell at once. And as emigration is taking away from Russia the best elements among the Jews, the government will have to stop it, if for no other than economic reasons. As to the effect of the protests, petitions, and prayers of

the Russian Jews to their own government, it can be said only that, if the history of such efforts in the past offers any criterion, there is no hope from that quarter. It is likely that foreign public opinion will be of more effect. Russia is popularly supposed to be hide-bound so far as outside criticism is concerned, but persons who ought to know assure me that such is not the case. The real causes for the persecution are explained in several ways. Upon one side it is said that the government wishes to strike a blow at nihilism through the Jews; also that the government incites Jewish persecution as a diversion that is likely to turn the public mind from other troubles and dangers. The prevalence of strikes and other manifestations of discontent in Russia, and the obvious necessity of doing something, give color to this view. Again, I have heard it said, but among the less intelligent of the Russian refugees, that religious fanaticism is at the bottom of the trouble. When the Jew becomes a Christian his troubles virtually cease, and it is surprising that during the last year not more than 1,300 Jews have renounced their religion, especially as such apostasy is not considered disgraceful by the Jews themselves. The Jew who nominally becomes a Christian because otherwise he would starve, remains a good Jew at home and among his kindred.

A question which is of great interest to Americans relates to the results of the emigration, now growing and likely to grow still further, of Russian refugees to this country. The stream first appeared in 1882. Some of these immigrants have been good settlers, who undoubtedly will assimilate with the people around them. Others herd in the great cities, notwithstanding the efforts of many educated and influential American Jews to get them out into the country; and these, while they are hard-working and frugal people, are less to be desired than farmers and country workers. In the third place, there are thousands of refugees who are compelled to make a living by peddling. A Russian of education, who has had much experience with his fellow countrymen here, and has contributed money toward helping them to colonize, sometimes with success, sometimes with failure, assures me that when failures do occur, the fault is not in the character of the immigrant but in the circumstances under which such experiments are made. As a rule, he has found these immigrants hard workers and anxious to do all in their power to help themselves. The fact that several of the colonies, such as those near Vineland, N. J., have been pronounced successes, is proof that there is hope in that direction.

At a meeting held in Paris, on October 9, 1890, at the instance of l'Alliance Israélite, at which, besides the well-known resident members of that organization, there were present the Reverend Doctors Adler, of London, Frank, of Cologne, Kahn, of Paris, and many other influential rabbis, together with a number of well-known laymen, including Sir Julian Goldsmid and Mr. Frederick Mocatta, representing London, Mr. Charles Hallgarten, representing Frankfort, Dr. Cohn, representing Berlin, and Mr. Jacob H. Schiff, representing New York, the question came up as to how Russian emigration should be controlled. The possible danger that renewed persecution might drive to this country Jewish refugees in such numbers that they would be a menace and a discomfort to the large towns in which they should settle, especially to New York, was set forth by Mr. Schiff. The possibility of directing emigration to other parts of the world, such as Brazil, South Africa, Palestine, and Canada, was discussed, and an address was sent to the rabbis of Russia, asking them, if possible, to prevent people unfit for immigration from rushing to this country or elsewhere. One of the letters sent by a rabbi in answer to this address gives so curious an account of the situation in Russia that I cannot do better than to translate it. It is dated November 10, 1890, and is not signed; but it is vouched for as from a rabbi of high repute.

"We are asked, in the name of our American brethren, to stop, if possible, the emigration toward New York, and to advise the emigrants to go to Canada or to South America. This request shows us that, notwithstanding your desire to help us, you do not yet understand—you who live in free countries and are free—the depth of the pit in which we live and the heaviness of the clouds which surround us. You may hear sometimes complaints from Roumania, from Morocco, or from Persia; but in those countries the persecuted Jews can move heaven and earth to make their hardships known; their hands are not tied, their lips are not sealed; they can appeal to the newspapers, they can send deputations and addresses to other countries imploring the help of their co-religionists there; they can consult together, make known the names of the persecuted ones, organize

committees. Here nothing of the kind can be done, for our government is a cruel and oppressive one as compared to the governments of those countries. It is a European government, using modern devices, but in reality it is European only in appearance; its machinery, perfected by modern science, is all the more effective and cruel toward us because it is used as an Asiatic would use it. We can say nothing; we cannot move; we cannot even tell our outside brethren of the rank misery in which we live. The law forbids an association or a meeting of more than ten persons, no matter for what object, without express permission of the government. To obtain this it is necessary to make petition after petition, and to go to trouble and expense; and, after a delay which may last two years or more, the permission may be granted only upon condition that not a word shall be said, and that not a line shall be written, of which the authorities shall not be advised. For these reasons all associations or clubs organized among us have failed. We know, it is true, that other citizens have to obey the law, but they are not called upon to discuss questions of which the government should know nothing. We have here no recognized chief who has the power, moral or official, to talk to the Jews or in their favor. Our 5,000,000 Jews are like scattered sheep, and nothing is allowed which might gather them together. In the last ten years our persecutors have trumped up another charge, regarding the famous Kahal, a mysterious power supposed to constitute a state within a state, suspected of designs upon public prosperity and of a desire to overturn the government. stupid charge is to be blamed for many of our troubles. The government pretends to believe in it; in everything that we do and say it sees the hand or influence of this Kahal, and it surrounds us with spies even while we pray at home. Unhappy as we are, miserably poor as we are, how can the rabbis, or any one else, do what you ask? We have no right to call a meeting for consultation, or in order to help our foreign brethren; it would be considered a crime. In Roumania, for instance, one is allowed to give advice to the persecuted Jew as to how he can best get away from persecution; committees are organized, money is collected, much is done. Here we are forbidden to meet, to make ourselves heard, or to express any opinion in public. Emigration is a misdemeanor and is punished with a fine; that is one of the curious aspects of our situation. This government, as in the time of another Pharaoh, does not wish the Jews to multiply, and shuts its eyes to the poor wretches who steal over the frontier; but if it should find a rabbi openly advising emigration, he would be held to be a traitor and treated as a criminal. If, therefore, I should give advice to refugees, telling them where to go, there would be a triple charge made against me: first, it would be said that the Kahal was assuming the authority of the state; secondly, I should be asked who gave me authority to speak; thirdly, I should be accused of encouraging emigration contrary to law. The real cause of the emigration to America, and in particular to New York, is due to the reports sent home to Russia by Jews already established in that city. Those who have escaped from Russia, from our life of somber misery, have found in their new country bread to eat and

free air to breathe; and they draw to them friends and relations who still remain here This is a stream which cannot be stopped. It must not be imagined that the emigrants leave the country deliberately, and with permission, after having weighed the advantages of other countries in which they might settle. They are often pressed for time, and they are really fugitives. They are escaping from Russia, from suffering, and from darkness. You may believe that their farewell is a painful one; but the thought of friends already settled in America, earning their living, and no longer ground down by corruption, gives them wings. Thus, even though the rabbis should have the right and the power to say to these poor people, 'Take such and such a direction, and not this other one,' they would scarcely find listeners. When a man is fighting for his life, he does not care for advice. These fugitives will listen only when you can help them. If Moses and Samuel should come forth from the grave to say to these poor people, 'Do not go to New York; go to Canada or to South America,' it would have no effect. Remember, moreover, that the country in which we live is three times as large as France, that our people are scattered in small villages, without means of communication, and that many of the Jews are too far in the interior of Russia to be reached. It is doubtless unfortunate that all the emigrants go to New York, and we understand that this congestion of people without means, without help, without trades, offers many inconveniences, and may seriously embarrass our American brethren. But we cannot turn the stream of emigration to other countries. Our American brethren, however, can do this. Let them organize committees to send the surplus and overflow of the Russian Jews of New York to Canada and South America, and then the emigration will follow these families; for as soon as it is known in Russia that there is room in those countries, emigration will turn that way instead of to New York. Upon our part, we shall do our best to help, and shall not shirk any legitimate responsibility, or even danger, to which this work may expose us."

I have no room here for the citation of particular instances of persecution. They fill the daily papers, for that matter, and will probably continue to fill them so long as these unfortunate people are made the legal prey of the petty Russian official. There may be another side to this picture; but, if so, I have failed to find any trustworthy indications of it. The facts remain that these obnoxious, cruel laws exist, and that they are so carried out as to make hundreds of thousands of poor wretches look upon the hardest kind of poverty elsewhere as a blessed relief from the hopeless misery of their native land.

P. G. HUBERT, JR.

# The Forum.

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### WHAT CAN WE DO FOR THE POOR?

A GENERATION or two ago, many people thought it not visionary to suppose that this new western world of ours might escape some of the painful evils which have so sorely afflicted the old. The youngest and fairest of the peoples could surely be spared the discipline of poverty and inherited misery. This seemed reasonable and probable to our forefathers; we know now that it could not be. While, under the freer conditions of our continental life, self-dependence and individual energy were to be nourished and developed in our people to a high degree, these could not by any means do away with or overcome the evils of unavoidable destitution. Gradually the rich became richer and the poor poorer. As in the older civilizations, wealth rolled up in a few hands. The laws of human existence were found to be the same in both hemispheres; the struggle for existence was the same old struggle.

We have, then, outlived any misconception that our fore-fathers had on this point; and all men with eyes and ears know well to-day that, in the making or marring of our national future, poverty must play its part. The questions that it forces on us must somehow be answered, and answered now; they can no longer be laid aside. We may be far from realizing all that is meant in the declaration that God "hath made of one blood all nations of

men, . . . for in him we live, and move, and have our being "; but we are far nearer its realization than men have ever been before. We may not love our brother as ourselves; we may not be quite prepared—if I may illustrate from the old story—to put him on our own beast, to bind up his wounds with our hands, and to take him to our own inn; but we are prepared to pay something for his keep and doctoring. We cannot nerve ourselves to leave him wounded and bleeding by the wayside, even though we may argue that he has fallen among the thieves largely by his own fault.

And so it comes about that, often in a blundering, unwise, and even improvident way, a large and increasing number of people are prepared to do something to serve the poor. Here I may be permitted to begindulgence for what may appear to many a very inadequate method of dealing with the great question. can speak of this problem only as it has engaged, in a measure, my own life. The city clergyman is like a line officer in battle; he stands pretty well in the smoke, or at least he ought to stand there. His circumstances seldom afford opportunities of gaining the larger, clearer views that only those on the higher ground can command; he can see things in his immediate front, and that is about all. Immediately in front, then, what does he see? As in every battle, an immense amount of wasted energy, a great deal of misdirected and positively hurtful enthusiasm, and much good ammunition thrown away. Helping the poor is both overdone and not done at all. Gifts are bestowed on those who are least worthy, but who, through long practice, can make the best showing of their needs. Those in whose lives independence is almost dead do not shrink from parading their wants; and a luxurious pity, anxious to rid its conscience of the burden of another's pain, is too often ready to give its hurtful dole, and to add to its list of luxuries the luxury of giving. This may seem an extreme way of describing the prevalent evil of indiscriminate charity; but that evil is so pernicious and so common, it renders the real and necessary work so hard to do, and, worst of all, it is so often adopted as an excuse by the very people that owe to their poor fellow men something far more than a dole, that it is hard to be patient with it. Lately it has laid hold of our newspapers. Their objects in establishing Christmas treats and Summer excursions may be quite free from all secondary considerations of self-advertisement, but sometimes they do more harm than good to the class that they attempt to benefit. The bold, pushing children are, of course, at the front; and some of those youthful debauchees can accomplish an extraordinary amount, and absorb wonderfully, during a few days. All who know the poor, know what demoralization Christmas brings among the children, what little real happiness or good results from the flood of presents that pours in for a short time, and how great premiums on greed, untruthfulness, and cunning these unthinking gifts really are. Through them the little ones are gaining dangerous glimpses of how much can be got for nothing by the smart child who knows the streets and their ways.

On the many partially-satisfactory efforts to grapple with the problems of the poor, it is needless to dwell. These efforts are increasing in strength, influence, numbers, intelligence, and efficiency, and doing more permanent good each year; yet we are not satisfied with them, nor should we be. We feel that we are but scraping the soil with a harrow, while it needs a steam plow. In spite of our efforts, the horrid, desolating tide of poverty is rising more rapidly than we can build our dykes to keep it out. To seek a certain comfort in the inevitableness of poverty, as some do, is impossible now to many, and will in a few years be impossible to any thinking, feeling man. All such men are quickly arriving at an agreement that something must be done, though no one seems to know exactly what it is or how to do it. The reception given to General Booth's scheme is a proof of this—a proof that a great and increasing band of able men and women are willing to follow as soon as a leader shall appear. As yet the leader has not come to them, and the scheme has not been propounded; nor, in my judgment, shall we quickly see either leader or plan. We may lay certain solid foundation stones, however, on which men of larger powers and of clearer vision may raise a great and everlasting superstructure. Such work as we do should be done so thoroughly that it will never need to be done over again. We may not be able to uproot poverty's bitter thistle crop, but upon parts of the field we can do something more

than merely to experiment—we can clear them. The problem presented to us is the most difficult one conceivable; but we have a certain accumulation of experience to call to our aid, and the halfdormant energy that is manifesting itself in the public will support any effort that seems to promise even partial success. First, I would say that any effort to reduce the tide of poverty, worth making, must deal with the sources whence that tide springs. Here is the weak spot in General Booth's scheme. Even if he could get his money, if necessary authority should be granted him, if his splendid idea could be fully accomplished, he would be like a man trying to pump out a ship through whose sides, by a thousand leaks, water is pouring. Any scheme that aims at floating the ship must, as an important part of it, devise means of calking those gaping seams. His scheme in no way deals with the homes and home influences of the poor, which are largely responsible for the worst elements of poverty. Most of the efforts put forth to-day to help the poor fail right here; they do not touch the sources of the evil. Let us look briefly at some of those sources. Foremost among them is the indifference of the poor themselves—their apathy as regards their own condition. They will not help themselves; they will not do what they can. One whose knowledge of these matters is much more accurate than mine, and who has lived and worked among the poor of New York for years, said to me recently:

"Our block is dirty. Why? From late in the afternoon of one day till the morning of the next, a solid row of vans stands against the sidewalk. These vans accumulate dirt. If the inhabitants of the block should unite in a protest, the law would, of course, be obeyed, the vans would be removed, and the streets would be cleaned, or at least they would be made cleaner; but the people are too indifferent to unite. Again, the law requires all landlords to whitewash their tenements once a year. If any neglect of this important provision should be met by a united protest from the tenants, it could not be so commonly ignored as it is now; but, for one cause or another, the poor will not unite. There is little fellow feeling among them—not even interest enough to induce them to interfere on each other's behalf when the weaker is wronged by the stronger. Nine times out of ten there are a hundred onlookers at a fight, but not one of the number cares enough to interfere, even to save from outrage a neighbor who may have lived near him for years. The multi-national nature of our population accounts in a measure for this, but the difficulties in the way of the creation of something like a common human interest only make the creation of any such feeling more imperatively necessary."

Another source of the worst sort of poverty is drunkenness. Among "the trades" there are few cases of need that do not arise from this cause. To pour abuse on the drunkard is easy and common; I cannot join those who do so, for to a great extent he is a victim of his circumstances. All New York tenement-house surroundings provoke to drunkenness; they combine and embody all the evils of crowding, heat, stench, and utter ugliness. In them privacy, decency, purity, have to struggle for existence against their environment. Besides, men and women who are honest with themselves, who do not live in tenement houses, in whose lives all sweet and beautiful things move and grow, whose leisure is abundant, and whose environment makes for good, know full well that there is something in the heated, high-strung, pleasure-loving spirit of our times which makes it necessary for the best and strongest among us to fight hard in order to maintain, even in society, a worthy standard of purity. Drunkenness, gambling, and impurity generally go together, at least in our own day. The reasons why they do so are not hard to find; I cannot now pause to repeat or to emphasize them. But that they do, all who know anything of New York tenementhouse life know well. To grapple with poverty in its worst and most destructive phase, we must grapple with these sources. We must do our fighting not only with individuals, but, as I have said, with causes. We must improve the tenement house, since we cannot abolish it; we must compete with the saloon. The improvement of the tenement house cannot be brought about by outside influence; an inside force is needed, and that a mighty force—a force that is intelligent and in the best sense Christian; a force that is not put forth fitfully or spasmodically, but bases its determination on a comprehensive survey of the situation. We need Peabody funds, such as the London bequest, on an immense scale; for in New York the crowd is greater and the climate more trying than even in London. We need, in short, such a state of aroused feeling and awakened conscience, of common pity and justice, as must lead our rich men to recognize the awful needs of the huddled masses. Sooner or

later, at huge cost if necessary, the rich must lead the way in giving air and breathing space, baths and recreation grounds, to those hundreds and thousands who for want of them are so grievously pressed down toward feebleness of body and viciousness of character. How long shall we see vast fortunes devoted only to the endowment of a degenerating offspring? How long shall so-called Christianity tolerate conditions of life that make for evil and not for good?

The so-called homes of the poor are no homes, in the sense in which we understand the word. The poor have no clubs but public houses. With an ignorance that is as fatal as it often is conscientious, unstinting abuse is lavished on these, their only resorts, and on those who frequent them, while no effort is made to supply anything in their place. The working people are debarred from enjoying works of art and things of beauty on the only day on which they can view them. The church, so far as it is Protestant, has almost deserted them, and in New York the public schools refuse to take their children till these have arrived at the age when the seeds of vice have been too effectually sown. Let me dwell on this important aspect of the question a moment. The wife of a working man, even if he is master of a good trade, or is in a position to earn steady and sufficient wages, cannot expect to bring up a family in more than three rooms, on the average. The kitchen is the living room, and, do what she will, the mother cannot keep her children around her. If the elder ones go to school, the little ones are her problem. They will play, they must play; but where? On the sidewalk and in the court? Here the worst little rascal in the block proudly rules as undisputed king. All he knows he imparts; his "secrets" are his power. Many mothers see the evil of all this, and some of them try to keep their little ones from other children, but most of them accept the inevitable. They would pay for kindergartens gladly, but kindergartens are few and far between. In the Tenth Ward of New York City, where are 57,000 children, there is only one kindergarten, accommodating but 50 scholars. The children who are old enough to go to school are in a sad way. They must not play baseball or any other athletic game: to do so is to make themselves liable to

They have no playgrounds; but gambling with pennies in a corner can be managed easily, and on almost every block there is some house where they can learn the "nobler" games of chance, and things worse even than these. There are houses that specially cater to childish vice—stores having partitions in the rear, behind which children practice prostitution. So long as the street is the only playground for the children, the evil spirits among their number—those who rule in these hells—must exercise a powerful influence on companions who, if they were granted better surroundings, would escape contamination. I am prepared to say that our chief work to-day should be done among the children. Our strength and our time are limited; we want to plant our blows where they will tell most, to sow our seeds where they will have the best chance to grow. A man or a woman who has pursued an evil course from childhood is almost always past help at twenty-five, but the children can be saved. They cannot, however, be saved by public schools, or yet by Sunday schools. They are not being saved; they are passing from bad to worse, and nothing can rescue them but an awakened Christian sentiment, that will not pause till their surroundings have become such as will give the divinity within them some chance to grow.

I have dwelt on the need of outside aid to our poor; but I repeat that even if there should be an abundant supply of such aid —as there is not—radical improvement would still be impossible till an inside co-operating force among the poor themselves should be set at work. How shall we create and develop this force? No scheme that fails to provide for this is worthy of consideration. I do not hesitate to say that the development of this power of self-help, self-respect, and self-dependence, can be, and should be, the work of the Christian church in all her branches. If Christianity cannot, to this extent, leaven the masses of the wage workers, it has failed, and, at least temporarily, must continue to fail. The wild ruin resulting from that failure may recall the church of Christ to a field that her faithless disobedience has led her for a time to abandon. Ethical and merely philanthropic methods are good, and gain temporary success because they are inspired by men who are unconsciously Christian in their senti-

ments, aims, and spirit; but sooner or later merely ethical movements will be abandoned. They are of necessity doubtful about certain points, where to doubt is to cut the very nerves of effort. They are doubtful, for instance, as to a personal immortality; and, sooner or later, all who enter the lists in this terrific struggle with woe and sin must realize that, if this life is all, then the goal is not worth the struggle, and human life itself is not worth the trouble it costs to make it good and to keep it good. We must hesitate to advise the poor to give birth to children whose pains may be keener than those of their parents, and whose pleasures may be even rarer. This work of development belongs, then, not to ethical societies, but to the Christian church. She believes in the value of man; for in him, be he never so fallen, she sees a spark of everlastingness. She professes to accept her Master's commands as divine laws binding on herself. His words and acts are perfectly plain; he never contemplated the abolition of all poverty, but he did distinctly command that men should, as they valued his gospel and professed obedience to himself, draw near to each other, forgetting and ignoring those things that for a short time made them to differ. He declared that the innermost and eternal verities of our nature all men have in common; and that his followers were to make much of these, while they were to make less of their differences of possession and attainment. Weakness, failure, poverty, were to draw us to our brother, not to drive us from him; for in the prevalence of these drawing, uniting, loving forces, over the sundering and disuniting forces, lay the hope of our race—he called it the coming of the kingdom of the Son of Man. All this we steadfastly believe, yet we condone the present state of things. Many do more than condone it; they are sincerely attached to it, they devoutly believe in its continuance, and so they are unwilling to make any adequate effort to change it. Our rich men still generally attend church; but there is often little in the public teaching of their churches to make them feel that it is their duty, as well as their privilege, to give money to bring about conditions where a civilized life is possible to the thousands whose hands have helped to pile up their fortunes. They are not taught, as they should be, that their wealth is literally not their own, and that to dispose of it as if it were their own is to sin grievously against the plain teaching of that Christ in the hope of whose name they profess to live and die.

The efficient workers among the poor are almost always drawn from the middle class. With a few notable exceptions, "society" people's work amounts to very little. Effectual charity work and the requirements of society do not easily consort. Those who subscribe to the various charities in New York with a liberality that bears any proportion to their means, are comparatively few indeed. An examination of charity returns proves this. A certain amount of amateur fingering with the skirts of this poverty question is indulged in by those people who are called fashionable, but the needs of such work make it impossible to undertake it so. To help our brother to-day, we must both study his case and take off our coats; no one can hope to live a life of pleasure, and at the same time take any real part in this struggle. Either pleasure or poverty must come first; and if society is put first—as, naturally, it often is—then much really useful work among the poor is out of the question. Since the church alone can offer to men the meeting grounds of the future, since she alone can draw men to the understanding of their fellow men, it is time that we should hold at its true worth this society charity that lifts its voice so high in our modern Babel, and is so useless practically. This sort of work is too often the only work attempted by ordinary church members in rich congregations. But what right have we to expect efficient work from members of any church, when the whole aspect of the modern Protestant churches, in our large cities at least, is repellent to the poor man? A church must be the embodiment of an idea; its very stones and mortar, its structure, as well as its services, should embody an idea. What possible Christian idea do our churches embody, as the poor regard them? When services are not being held, the buildings are generally closed. What possible use can an artisan have for a church that rents its pews at figures ranging from \$50 to \$1,200 a year, perhaps reserving, in out-of-the-way places, a few uncushioned free seats? He has to make a journey to reach one of these churches, for they have steadily gone farther and farther away from the quarter where he lives. From the huddled, heathen, lower city he sometimes comes on Sunday with his children. Let him pass the churches and go to the park; there is no real place for him till he gets there. Even there the influence of the churches—so he believes, at least—follows him, and closes in his face the museums and galleries, for whose support he pays far more than his share. The churches have no message for him, nor will they allow him to spell out any message of good will for himself.

It is sad folly. These churches could help the poor man. They could take to him their beauty and space, their restful quiet, the rich glory of their colored glass and pictures, the inspiration and peace of their music; and more, far more than these, that message of good will to men of which all beautiful things are but the setting—that one lasting and only explanation of the meaning and purpose of toil and pain in human life which the birth, death, and resurrection of a God-man offer. But what do they do? They support a policy which keeps all these things for the few whose lives are already full of the enlarging elements which the dwellers in tenement houses utterly lack. The best churches, the strongest church organizations, have deliberately deserted the field where the strife is hottest, and have sought those rich localities where support is easy. As organizations providing Christian culture for those of the cultured who wish to attend and support them, they answer their purpose well enough; but as embodying, in any real sense, the comprehensive and aggressive mission of a living Christian body in these times and conditions of ours, they are hollow mockeries and utter failures. The feeble line of missions that they support are as incapable of making any lasting impression on the huddled, heathen, sometimes hungry, masses of working folk, who are fast becoming more than indifferent to all religion, as a skirmish line would have been incapable of carrying and holding Missionary Ridge or Plevna. The poor forget the church, because the church in our great cities has first forgotten the poor; she has dissociated herself from them. The very name "missionary," applied to a man or a woman, be he or she never so capable, is a serious barrier to confidence and to any free interchange of sympathy. The church's methods and machinery are antiquated; her language needs constant explanation. And more than this, some of her ablest teachers and leaders seem determined to fasten on her a policy of inaction. They believe in the leathern bottle of fifteen hundred years ago; it held good wine then, ergo there is nothing like it to-day. They cannot be induced to provide new leather for new wine, and they regard the rending of the old leather and the loss of its contents with something like the complacency of utter ignorance. The rector of the wealthiest Protestant church in the world, in a letter to the New York "Herald" of November 30, 1890, over his own signature, says:

"The church was not founded with the direct view to moral culture, class elevation, etc. I have no confidence in the judgment or wisdom of those who tell us that the church must try to reach the masses, purify politics, elevate the laboring classes."

No wonder, when leaders take such a position, that the masses turn from them with bitter impatience, and often turn, too, from the church in whose name they so mistakenly speak.

When it is proposed to collect and expend money for a church edifice that shall embody American Christianity more fitly than any other, the collective wisdom of the church in New York proposes to place it—the new cathedral—where it will be practically inaccessible to the very poor. Surely it does not need any great penetration to see that two or three large free churches, built on cleared spaces, on east and west down-town sites, always open to the public, provided with real preachers, and having each a large kindergarten, a swimming bath, and a gymnasium, as important parts of its outfit—that these, adequately supported and endowed, would be a recognition of our past and present ignorance and neglect, and a step, nay, a stride, in the right direction. Near these churches a band of unmarried clergy and picked lay workers should live, undertaking duty for a stated time, perhaps; and under their control all these accessories of civilization could be placed. This plan would cost money; but it would do more to right the church in the eyes of the working people, it would more immediately affect the life of the metropolis, it would do more to sweeten and purify the bitter springs at which the poor must drink, than the building of ten cathedrals would ever do. To right the church in the minds of the poor is the

duty of the hour. It is the best work that can be done at present for the development and upbuilding, among our city population, of a life which, by virtue of its true virility, shall cast off poverty's worst ills as a healthy body throws off disease.

I have been asked to write on work among the poor. I have dwelt on the churchly and Christian side of it, because I am convinced that the work to be done to-day can be successfully done only by are converted church. Soon or late the state will be obliged to institute great changes. Private philanthropy, corporate charity, can never altogether remove evils that one day we shall unite in regarding as intolerable—evils that dwarf and cripple the youth of our country. But to-day much can be done. The duty of the hour is to bring man nearer to man, to bridge a fast-widening and fast-deepening gulf that divides the rich from the poor. Our statute books are encumbered with the records of inoperative legislation, because such enactments do not rest on moral convictions among the bulk of our people. Legislation will amount to little till it shall be the practical voicing of an aroused public conscience. To awaken and to educate man's sense of duty to his fellow, is the work intrusted to the church of God. To do this work she must anticipate legislation, not merely follow in its track. She alone can reveal to men that broad and everlasting foundation on which all true progress and prosperity can be based—an unquenchable belief and hope in a Father infinitely wise, loving, and just, and an unalterable love, respect, and pity for a humanity capable at last of understanding and enjoying him forever. To reply to the cry of the poor to-day with money only, is to offer a hungry man a stone. The poverty around us —the poverty we must minister to—dwarfs the man, for the worst ache it knows is the ache of a wronged and hungry heart.

W. S. RAINSFORD.

## THE FATE OF THE ELECTION BILL.

In December, 1889, the Republican Party succeeded to the legislative power for the first time in sixteen years. During all that period the men entitled to speak for it, if anybody could speak for it, had insisted that it represented the true and lawful majority of the American people. They had held that the House of Representatives, as constituted for fourteen years of that time, and that the presidency itself, when occupied by Mr. Cleveland, represented nothing but usurpation, by which, in large districts of the country, the will of the people had been defeated. party attributed more or less importance to other questions; there were resolutions in State and national platforms on other subjects, in regard to some of which differences of opinion were known and tolerated; but no difference of opinion was ever heard of among Republicans as to the duty of providing a remedy for this great wrong. The Chicago convention of 1888 placed the subject foremost in its platform, devoting to it three resolutions, as follows:

"We reaffirm our unswerving devotion to the national Constitution and to the indissoluble union of the States, to the autonomy reserved to the States under the Constitution, to the personal rights and liberties of citizens in all the States and Territories in the Union, and especially to the supreme and sovereign right of every lawful citizen, rich or poor, native or foreignborn, white or black, to cast one free ballot in public elections and to have that ballot duly counted.

"We hold a free and honest public ballot and just and equal representation of all the people to be the foundations of our republican government, and demand effective legislation to secure integrity and purity of elections, which are the fountains of all public authority.

"We charge that the present administration and the Democratic majority in Congress owe their existence to the suppression of the ballot by a criminal nullification of the Constitution and the laws of the United States."

Republicans might be men who favored a high tariff or a low tariff, free raw material or a duty on everything that can profitably be produced here, silver currency or bimetallism; but these resolutions were accepted everywhere as constituting the very definition of Republicanism. It is believed that a Republican constituency could scarcely have been found in the country within the past fifteen years which would have elected to any considerable political office, State or national, any man who denied them.

The writer, in presiding over the convention which nominated President Garfield at Chicago in 1880, charged that the Democratic Party had done or had tried to do nothing in this country for sixteen years except to break down the legal safeguards which make free elections possible.

"United in nothing else, proposing no other measure of policy, it wages its warfare upon the safeguards which the nation has thrown around the purity of its elections. It can see nothing else of evil, except that a freeman should cast a free vote under the protection of the national authority."

And, after reciting some of the great achievements of the Republican Party which have affected the business interests of the country, he added:

"But not for these things alone does the Republican Party challenge your respect or demand your confidence. National wealth may exist, commerce may increase, in a nation whose people are degraded and enslaved. The keynote of every Republican platform, the principle of every Republican union, is found in its respect for the dignity of the individual man. Until that shall become the pervading principle of the Republic, from Canada to the Gulf, from the Atlantic to the Pacific, our mission will not be ended. The Republic lives, the Republican Party lives, but for this: that every man within our borders may dwell secure in a happy home, may cast and have counted his equal vote, and may send his child at the public charge to a free school. Until these things shall come to pass, the mission of our party will not be accomplished, nor will its conflict with its ancient adversary be ended."

It will not be doubted that "the effective legislation" which the Chicago platform of 1888 promised to the country, "to secure integrity and purity of elections, which are the fountains of all public authority," meant legislation by Congress. The convention was announcing the purpose of a national party in regard to national elections. It had no expectation that it could, in the campaign for which it was defining the issues, dislodge its antagonist from power in the States where the abuse chiefly existed. After the election of 1888, when it became known that the Re-

publicans had elected the president and a majority in each house of Congress, many bills, intended to secure honest elections of members of the House, were introduced in the Senate during the short session beginning December, 1888, and were referred to the committee on privileges and elections. The chairman of that committee brought to Washington, in December, 1890, a carefully-prepared bill based on one introduced by Mr. Sherman, providing for holding under national authority separate registrations and elections for members of Congress in all the States; but it was found, on consultation with every Republican senator except one, that a large majority were averse to an arrangement which would double the cost of elections throughout the country, and which, in States where personal registration every year is required, would demand from every citizen his presence at the place of polling or registration four times every alternate year. Accordingly, another bill was drawn, which provided for national officers, of both parties, who should be present at the registration and election of members of Congress, and at the count of the vote, and who should know and report everything that should happen, so that all facts affecting the honesty of the election and the return might be before the House of Representatives. To this were added some sections providing for the punishment of bribery, fraud, and misconduct of election officers.

The bill was ready to be reported early in February, 1890. But in the mean time the House of Representatives had appointed a committee charged with a similar duty. Members of that committee thought, with much reason, that a measure which concerned the election of the House should originate in that body. Accordingly, the Senate committee held back its bill, and awaited the action of the House, which, on July 15, 1890, sent a bill to the Senate. The bill passed by the House dealt not only with the matter of elections, but also with the selection of juries and some important kindred subjects. The Senate committee struck out everything that did not bear directly on elections, mitigated the severity of the penalties, and reduced very considerably the bulk of the bill. The measure was reported in a new draft by way of substitute, and remained before the Senate until the beginning of the present session, when it was taken up for

action. It was a very simple measure, and merely extended the law which, with the approbation of both parties, had been in force in cities of more than 20,000 inhabitants since 1870. This law had received the commendation of such leading Democrats as the late Mr. Cox, Secretary Whitney, the four Democratic congressmen who represented Brooklyn, and General Slocum. then representative at large from the State of New York; and it had been put in force on the application of Democrats quite as often as on that of Republicans. The bill modified it by providing that, in case of a dispute concerning an election certificate, the circuit courts of the United States should award a certificate entitling the member to be placed on the clerk's roll, and to hold the seat until the House itself should act upon the case. This provision is copied from an English law enacted in 1868, which, though viewed with great apprehension by the English judges, as likely to bring them into politics, has been carried out there to the entire public satisfaction.

The bill reported provided that, on the application of one hundred voters, the registration and election, though left entirely in the hands of the State officers, should be witnessed by supervisors belonging to the two political parties, who should preserve the facts for the information of the House, or, in case the intervention of the court should be sought by either candidate, for the information of the judge. This, and a few provisions against bribery, frauds by election officers, and abuse of power by the officers of the United States, made up the whole of this much-abused bill. It did not provide for the use of any force whatever, still less for the calling out of troops. It did not interfere in the least with the State election officers in the performance of their duties, or remove the conduct of elections from the States. It did not apply to the South more than to the North. It did not in the least affect State or local elections. gave no exclusive control to either political party. While it originally provided that the supervisors should consist of three persons, only two of whom should be of the same political party, that feature was changed, after the bill reached the Senate, by a provision that there should be at each polling place but two supervisors, who should be of different political parties.

It is impossible to think that any man who understood this bill could oppose it unless he desired the continuance of fraud or of violence in the election of representatives to Congress. During the progress of the bill several amendments were made, all intended to remove the doubts or the objections of its opponents. An amendment had been carefully prepared, on consultation with Senator Allison, to provide against excessive fees, and to establish a system by which the accounting officers of the treasury should oversee the supervisors; and notice of this amendment had been given. When it was suggested that the phraseology of the bill might be construed to make the chief supervisor a life officer, or to limit the power of the judge and to increase that of the chief supervisor in the appointment of subordinates, amendments were at once consented to for the purpose of removing all such doubts. A bill of the same length or of the same importance can scarcely be found to which, however carefully it may have been prepared, more amendments have not been found necessary in its passage through the Senate. The great appropriation bills, which are prepared by experienced committees, and which go over the same ground year after year, frequently require hundreds of amendments in the course of their passage. No Republican who refused his support to the bill suggested any other measure, or scheme, or plan, or offered any amendment of importance that was not instantly accepted.

The bill was reported to the Senate on August 7, 1890. Meantime the tariff bill, which had been made by Mr. Cleveland, so far as he could make it, the sole issue in the late presidential election, had been matured and reported. It affected all the business interests of the country, and they were in a state of uncertainty and alarm. Mr. Quay, of Pennsylvania, proposed a resolution to the effect that certain enumerated measures, not including the election bill, should be considered at that session, and that all others should be postponed. There were Republicans enough in favor of the resolution to give it a majority, if it had been brought to a vote. This would have postponed the election bill without any assurance of its consideration in the short session. An agreement was therefore made, at a conference of Republicans, to the following effect:

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"We will vote: 1. To take up for consideration on the first day of the next session the federal election bill, and to keep it before the Senate, to the exclusion of other legislative business, until it shall be disposed of by a vote. 2. To make such provision as to the time and manner of taking the vote as shall be decided, by a majority of the Republican senators, to be necessary in order to secure such vote, either by a general rule like that proposed by Mr. Hoar, and now pending before the committee on rules, or by special rule of the same purport, applicable only to the election bill."

This was signed by a majority of the entire Senate, and entitled the friends of the election bill to the assurance that it would be brought to a vote at the short session.

It will, I think, be clear from the foregoing narrative that the Republican Party had promised to do its best to secure honest elections, by the exercise of the national legislative authority, and that the purpose to keep that promise is the one essential thing that constitutes Republicanism. To that promise the President and the great body of the Republicans in the House and in the Senate have been true. The mission of the Republican Party will not be accomplished until that promise shall have been kept. At present, the Fifteenth Amendment, and so much of the Fourteenth as relates to suffrage, are absolutely nullified. condition of things in this country to-day, so far as relates to the election of representatives and presidential electors, is as if those two amendments did not exist. Let us see where the responsibility for this condition of things belongs, and what has been, and is likely to be, its effect upon the great interests of the country. I do not speak of the gentlemen, elected by Republican constituencies, who have separated from their brethren. It is no part of my duty to discuss the action of my associates in the Senate, except to answer their reasons in debate if I can. I am speaking now only of the larger influences which have made possible the overthrow of popular elections in this country, and the nullification of the Constitution itself, so far as it provides for such elections, and which have baffled any attempt to apply to these crimes a simple, lawful, constitutional remedy.

If the body of northern business men, the body of self-styled "reformers," the body of educated and wealthy men, who are indifferent to their political obligations, had acted for the past fifteen years with the Republican Party, election practices which

have made so many States of the South solid against the wishes of a majority of their own people, would have been unavailing. I believe that the great bulk of the business men of the North are, upon this question, sound to the core. I believe that they prefer liberty and honesty to ease and wealth. I believe that the great body of reformers and lovers of pure government in this land are to be found in the ranks of the Republican Party. But the overthrow of constitutional government in this country is due to the defection of the classes to which I have referred. Those classes will be the first to experience the bitter penalty, and it will fall on them most heavily. They have sent representatives to Washington from northern States to vote for a speaker in full sympathy with these practices, and for an organization of the House which will render the suppression of them impossible; to vote, in all disputed election cases, to assign to southern contestants the prizes in these Isthmian games of violence and fraud, and to vote against every attempt to secure free and fair elections by legislative authority or by the authority of the courts. It has frequently been demonstrated that, by reason of this usurpation, a number of representatives, varying from 39 to about 60, sit in the House, in places which, without such usurpation, would be filled by Republicans. In addition to this, many presidential electors and many senators owe their appointments to the same practices, although, in the case of presidential electors and senators, a remedy by national power is more difficult. The votes of these men have always been thrown against the interests and opinions of the business men and of the so-called reformers of the North, who have been in such large degree their political accomplices.

Take two recent examples: There is no pending measure which the business men of the country think likely to be more injurious to our prosperity than the proposition for the free coinage of silver. They think that, if the proposition should be adopted, the measure of our circulating medium, the measure and standard of all prices and contracts, would be in a state of constant fluctuation. They believe that, in such a case, every man who is hereafter to receive a dollar, whether in payment of a debt, in payment of a savings-bank deposit, in payment of a

pension, or in payment of wages, would receive a dollar whose value cannot be calculated beforehand, and about which he knows only that its value will be much less than that which he is now entitled to receive. They believe that the relations of this country to all the commercial nations of the earth would be seriously affected for the worse by such a measure. They believe that it would introduce a new period of speculation and of financial dishonesty. Yet, while they affirm this so vehemently. so conscientiously, so truly, it is due solely to them that the country is in any danger whatever from this source. On the recent test vote, where the attempt to put a provision for the free coinage of silver upon an appropriation bill was defeated by a majority of seven—the vote being 134 to 127—only 11 Republicans voted in favor of the provision, and but seven Democrats voted against it. Every Democratic vote in the House from States south of Mason and Dixon's line was for this measure. And yet committees visit Washington to utter earnest protests, almost every man of whom has given all his influence toward the election of these representatives and toward the overthrow of every practical measure which would have prevented 39 seats from being wrongfully filled by the advocates of free silver coinage. They tell us that the proposition to make a silver dollar of the present weight equal in value and in debt-paying power to a gold dollar of the present weight, is debasing the currency; that such a dollar is only another form of the old clipped dollar, and of the old clipped sovereign which Macaulay said wrought more harm to the people of England than all the tyranny of the Stuarts. And yet to-day the danger of the debased dollar comes solely from the political action of these gentlemen who profess to be so earnest in their opposition to it. Do they think, when they have introduced in the United States a clipped Constitution, a clipped manhood, a clipped suffrage, and a debased franchise, that clipped coinage and debased currency will not follow? Do they think, when every American is himself "a clipped sovereign," that he can hope very long to carry an honest dollar in his pocket, if the men who debased him are under any temptation to debase that dollar? In the Senate every Democratic vote but three was given for this proposition

to lower the standard of the currency, while every Republican vote but 16 was given against it. Even the senators from the six newly-admitted States—Washington, Idaho, Wyoming, Montana, North Dakota, and South Dakota—in spite of the excitement of the people on that subject, in spite of the fancied interests of their mines, were evenly divided by their votes, or by their pairs, on this question. Every senator from the States the honesty of whose elections is in question, voted for the measure which their northern and eastern allies and accomplices profess so much to detest.

The business interests of the country have long earnestly demanded the passage of a bankruptcy bill. The framers of the Constitution intended that the passage of such a measure should be imperative upon Congress. If it could pass, not only would equality and honesty in the division of the estates of debtors among their creditors be assured, not only would immediate relief be given to the hundreds of thousands of debtors who are now carrying with them the chain of their indebtedness, and who, unless the passage of the pending measure shall be effected, will carry it with them to their graves, but the interest upon money throughout the South and West, where the best securities now bear eight, ten, or twelve per cent., would be reduced nearly to the rates that prevail in New York and New England. When this measure was last before the Senate, every Democratic member of that body voted to strike out "the involuntary clause," and thereby sealed the fate of the bill. When the bill now on the Senate calendar passed the House of Representatives at the last session, there were only 12 southern votes for the measure, seven of which were cast by Republicans, while there were 38 Democratic southern votes against it.

I see that a gentleman for whom I entertain great personal regard, has written to Mr. Cleveland that the southern Democrats were obliged to vote for the silver bill because of their apprehension of the passage of the election bill. He seems to think that the excuse, if not reasonable, is at least natural. I could not help wondering in what corner of Russia or Turkey he had been born, under what slave whip he had been brought up, what doctrine of submission to despotism he had learned, that he could

write such a letter without accompanying it with a single expression of manly indignation.

While the suffrage is violated or debauched, no interest of the country is safe. If injustice lies at the foundation of our political power, justice will not long be found anywhere. The pestilence which has its origin in the hovel, fills the palace also with mourning. Where the poor man is deprived of his vote, the wealth of the rich man loses its value. The peaceful remedy which has just been defeated would have saved many a disaster that is to fall most heavily on the men upon whose blindness, or indifference, or cowardice, rests the blame of this defeat. The question will not down. Nothing is settled that is not right. It is to be hoped that when, in 1892, a new appeal shall be made to the conscience and understanding of the American people, they will put forth strength enough to throw off the nightmare which oppresses them, and that it will still be in their power to vindicate in peaceful ways the rights which otherwise will surely be asserted through convulsion and in blood.

GEORGE F. HOAR.

## A DEFECTIVE CENSUS.

The Constitution requires Congress to provide for a decennial enumeration of the people of the United States. It was not intended thus to make a vain show of our national strength, but solely to secure to the people of each State their proportionate representation as stipulated in the organic law. When the population has been correctly ascertained and returned, it is the duty of Congress to apportion representatives among the several States according to the numbers so returned. If the return does not include "the whole number of persons in each State, excluding Indians not taxed," the right of representation, to the extent of the omission, is confiscated and lost. That right is the right preservative of all rights, and unless it is secured, every other is beyond the protecting power of the citizen. Under a free government no right should be more jealously guarded, none should be more firmly supported, and encroachment upon none should be more universally condemned. If any considerable number of persons is omitted from the return, and if that number is sufficiently large to be entitled to one representative, the wrong should be exposed and the proper correction should be made. Where the false return affects only a few small localities, the injury is comparatively insignificant; but when, either by negligence or by design, it extends so far as to decrease the number of the majority party and to increase the number of the minority party until they seem to have exchanged positions, then the wrong transfers the governing power from the majority to the minority and affects the entire people.

Since the advent to power of the present administration, a suspicion has been entertained by many that the eleventh census would prove to be a partisan raid on the right of representation. The official report of the census bureau, now made public, has not entirely removed all cause for that suspicion. The announcement that our population is only 62,662,250 was a genuine

surprise, not only to those who looked for the dark side of the picture, but also to those whose faith in the administration and its census bureau had never for a moment wavered. The census of 1880 gave us 50,155,783. The present returns give us an increase of 12,466,467, which is at the rate of 24.86 per cent. That this number is not even approximately correct, may be seen by comparing the increase in this decade with the gains in others which have preceded it. It will not satisfy the candid mind to say that this is the actual enumeration, and that it cannot be impeached by comparison with those of other decades or with the estimates of experts. Any alleged fact that is without the pale of probability, stands impeached at the very threshold of the inquiry, and must be verified by competent evidence. If the census returns had stated that a million of our people exceed twenty feet in height, or that one half of them have red eyes and the other half blue hair, no one would have believed the report. If they had shown that our population had decreased during the decade, that statement would have been equally incredible. None of these reports would have been credited, because all of them would have been beyond the boundaries of probability. Any statement reported to be true, in order to receive credence must be in harmony with things that we know to be true.

It is improbable that our population does not exceed the number reported. The report is out of harmony with those of every other decade of our history, except that of the civil war. From 1810 to 1860 our decennial increase ranged between 36.38 and 35.58 per cent. At no period outside the war period has our increase been so low as 24.86 per cent. Nothing short of war, pestilence, or famine could account for such an extraordinary fall in the rate of increase. Mr. Porter says that the general law governing the increase of population is that "it goes on at a constantly-diminishing rate." That is true generally, but not universally. From 1790 to 1800 the percentage was 35.10; in the next decade it was 36.38. Here was an increasing rate, not a diminishing one. From 1810 to 1820 it was 33.07 per cent. Here was a diminishing rate, but it did not continue to fall, for from 1820 to 1830 it was 33.55 per cent. From 1830 to 1840 it was 32.67 per cent., but from 1840 to 1850 it

was 35.87 per cent. These fluctuations were caused by the introduction of the factor of immigration. In decades where the immigration is larger, the percentage of increase is larger, and where it is smaller, the reverse is true. If additions and subtractions by immigration, wars, pestilences, and famines are left out of the computation, the rate of increase of population is found to be constantly diminishing; but the diminution is gradual and steady; it is not volcanic or spasmodic in its movements, as the report of the eleventh census would show it to be.

In order to get nearer to the law that governs the increase of population, we should eliminate immigration from our estimates. Its presence tends only to obscure the problem and to make it more difficult of solution. In the decade from 1840 to 1850, when we had 35.87 per cent. increase, we had more than a million of immigrants in excess of those of the preceding decades, and from 1850 to 1860, when we had 35.58 per cent. increase, we again had a million more immigrants than in the decade immediately preceding. But from 1860 to 1870, when our increase was at the rate of 22.63 per cent., we had a decrease of immigration as well as a tremendous civil war. From 1870 to 1880, when our increase was at the rate of 30.08 per cent., the lowest we had ever had outside of the war period, our immigration exceeded that of the preceding decade by only 420,000. Our immigration from 1880 to 1890 was 5,246,613, without including accessions from Mexico, and from the British possessions since 1885, which the bureau of statistics estimates, from Canadian records, at 540,000, making the total of immigrants for the decade 5,786,613. This number is more than twice as large as that of any former decade, and yet the percentage of increase falls from 30.08 to 24.86! Where does this enormous shrinkage come from? Certainly not from wars, pestilences, and famines, for we have not been visited by any of these scourges during the last ten years. By subtracting from the total population the number of immigrants received in each decade, we can ascertain the rate of natural increase in each. From 1820 to the present we have official reports of the numbers of immigrants, and subtracting these from the totals in each decade, we find that the rates of increase have been as follows:

From	1820	to	1830,	31.65 per	cent.
6.6	1830		1840,	28.01	66
	1840		1850,	25.83	66
6.6	1850		1860,	24.45	66
	1860	6.6	1870,	15.38	66
6.6	1870	66	1880,	22.78	6.6
			1890,		66

If we do not subtract the estimated immigration from Canada, the last rate becomes 14.39 per cent.

Here we see Mr. Porter's law of the diminishing ratio, and observe how closely the successive falls approach one another. In the decade from 1860 to 1870, we see an abnormal depression from 24.45 per cent. to 15.38 per cent. It ended before the next decade began, and the rate of increase took its normal place in line at 22.78. From 1880 to 1890 it should have been close to 20 per cent.; but the census report tells us that it was 13.32 lower than during the war decade. An increase of 20 per cent. would have brought us in the neighborhood of the estimates of the experts of the Treasury Department. Professor Elliot, actuary of the Treasury Department, estimated the population for 1888 at 62,728,000, and that for 1889 at 64,554,000. He did not carry forward his calculations to 1890; but if he had done so, using the same ratio of increase, he would have estimated our population in 1890 at more than 66,200,000. Mr. McCoy, his successor, estimated our population for 1888 at 62,621,000, for 1889 at 64,403,000, and for 1890 at 66,236,000. Both of them adopted the actual returns made in 1880 as the basis of their estimates, and, judging by Mr. Porter's report, both aimed wide of the mark. To impair the value of Professor Elliot's estimates, it is asserted that he put our population for 1880 at 50,858,000, while the actual count showed it to be 50,155,000. That is true. He made this estimate in 1874, and doubtless took into account the large influx of population that had been for five years pouring upon our shores. Unhappily for his prediction, it began to fall off, and continued to fall till 1879, when it began to revive again. During the last half of the decade the annual decrease was more than 100,000 below the average of the five preceding years. When proper allowance has been made for this, his figures for 1880 will be found to be in the neighborhood of those obtained by the enumerators.

The actual numbers returned for the years 1870, 1880, and 1890 show that 38,558,371 people made a larger natural increase from 1870 to 1880, than 50,155,783 people did from 1880 to 1890. Deducting the immigrants from the figures of both periods, the increase in 1870-80 is found to have been 8,785,121, and that in 1880-90 to have been 7,219,854. Can it be seriously contended that 38,000,000 people increased 1,000,000 more than 50,000,000 of the same people did? The census report declares that startling fact, but the Superintendent asks the people to believe only one half of it. He sees the palpable absurdity of such a statement, and to escape it plunges into a worse one. He assails the census of 1870, and says that it should have shown 39,818,449 people instead of 38,558,371, and that the increase in the previous decade should have been 26.6 per cent. instead of 22.63. To make his logic fit the situation, he adds 1,260,078 to the returns of 1870. This addition makes the percentage of increase from 1870 to 1880 25.9 instead of 30.08 per cent. Is it possible that Mr. Porter can be serious when he says that our population increased during the war decade faster than in the peace decade following? Does he ignore the fact that immigration during that decade was more than 300,000 below that of the preceding decade, and more than 500,000 below that of the succeeding decade? Does he ignore the facts that more than 500,000 people perished from causes arising out of the war, that from 2,000,000 to 2,500,000 men were in the field, and that a vast number of these were husbands who were separated from their families for a great part of that time? He ignores the war and all its destructive effects on population, and contends that, during all that time, when the sexes were separated to so great an extent, there were more births than in the next decade —a period of profound peace.

Thus the Superintendent has been placed by his enumerators in an unhappy situation. To escape the conclusion that their figures have forced upon him—that 38,000,000 people have increased faster than 50,000,000—he flies for refuge to the still more absurd position that the increase of our population was

greater during a time when the sexes were separated than when they were united. Taking the corrected figures of 1870, as made by the Superintendent, and leaving out immigration, the rate of increase from 1860 to 1870 is 19.38 per cent. Here is still a spasmodic fall from 24.45 to 19.38 per cent., though the diminution of the rate was less than two per cent. in the preceding decade. The rate of increase from 1870 to 1880 is reduced by Mr. Porter's corrections to 18.89 per cent., which is as much too small as the other is too large. From 18.89 in 1880 Mr. Porter plunges to 13.32 in 1890. Thus the diminution of the rate has changed suddenly from one half of one per cent. to five and a half per cent. It is plain that his corrected statement does not extricate the Superintendent from the position in which he is placed by his enumerators. It may be true that the census in South Carolina was defective in 1870, and perhaps it may have been so to a small extent in some of the other southern States. The non-enumerated in all of them were not more than half a million. Now if we take the census of 1870. and add 500,000 for those omitted and 2,000,000 for the loss of life and the retardation of increase caused by the war, we shall have the following rates of increase, immigrants being omitted:

From	1820	to	1830,	31.65
4.6	1830	66	1840,	28.01
66	1840	66	1850,	25.83
6.6	1850	66	1860,	24.45
66	1860	66	1870,	23.33
6.6	1870	44	1880,	21.50
88	1880	66	1890,	13.32

Thus it is evident that whether we take Mr. Porter's figures without any allowance for the war, or with the effects of the war added, they by no means account for the apparent loss of population, which has been, as shown by him, greater during the decade just ended than it was during the decade of hospitals, prison pens, and battlefields. The percentage of 1890, to be in harmony with the whole line of preceding decades, except that of the war, should have been nearly 20, which would have given us a total population of 65,000,000 or 66,000,000. It is said that the very low rate of increase, as shown by the census of

1870, in Virginia, North and South Carolina, Georgia, Alabama, Mississippi, Louisiana, Kentucky, and Tennessee, proves that their populations had not been correctly taken. Does not that record point rather to the terrible results of war? For nearly half that decade almost all the males of the white race who were able to bear arms were in the field, and thousands of them perished. Did it ever occur to Mr. Porter that vast numbers of them fled with their slaves before the advancing armies of the United States and took refuge in Florida and Texas? He did not embrace these two States among those whose populations he says were not enumerated correctly. Texas showed in 1870 an increase of 35.48 per cent., and Florida one of 33.70. It is strange that while their sister States of the South were neglected by the enumerators, they fared so well. Each showed a greater increase than any one of the New England States, New York, New Jersey, Pennsylvania, Delaware, Maryland, Ohio, or Indiana, and was about 13 per cent. above the average of all the other States. Mr. Porter thinks that the low rates of increase reported for Kentucky and Tennessee in 1870 prove that they were neglected in the census of that year. But, though they had 500,000 men in the field during four years of the preceding decade, their population increased at the rate of 14.30 per cent., while during 1880-90, when all their citizens were at home, it increased, according to the recent census, at the rate of only 13.65 per cent. If an increase of 14.30 per cent. in time of war is so low as to justify the conclusion that they were neglected then, what conclusion is to be drawn from the lower rate of 13.65 in a time of profound peace and undisturbed prosperity? If they went without proper representation in Congress then, what is the outlook now? There is no room to doubt that the census was substantially correct then, and that their increase of 23.70 per cent. in 1870-80 was the natural result of peace and of the return of soldiers to their homes. But who can account for their fearful leap backward in 1890? The small increase of the colored population in the South was attributable to the same cause that hindered the growth of the white population. Many thousands of them were enlisted in the armies of the United States, and many thousands more were attached to the armies in different capacities. The

same cause that reduced the rate of increase among the whites reduced it among the blacks. It is possible that South Carolina and some others of the southern States may have been underestimated in 1870, but they have fared worse under the census of 1890. It is strange that a gentleman of Mr. Porter's intelligence should wholly ignore the war as a factor in reducing the rate of increase of population of "the fire-girt circle." He seems to be oblivious of the fact that the country of which he speaks was the theater for four years of the most gigantic war that has ever occurred in the world. He is mistaken in his assumptions; it was not the census of 1870, but the one of 1890, that caused the discrepancy.

The statistics of scholastic population taken in the different States of the Union show that the census of 1890 is not correct. The children of school age are enumerated by officers appointed under the authority of the State governments. Their number is annually reported at Washington, and from the rate of annual increase of those within given ages the total population of each State can be closely calculated. I am informed by the Commissioner of Education that there were in Texas in 1880, 311,-567 children between the ages of eight and sixteen years; that the children between those ages increased between 1880 and 1890 at the rate of 86.4 per cent.; and that the population of the State in 1890, if the whole increased in the same ratio, should have been 2,966,000. The census gives us 2,235,523. Here is a loss of about 700,000. Why should not the whole population have increased at something like the same rate? That four fifths of the people increased at about the same rate that one fifth did, can hardly admit of a doubt, and one or the other of these returns must be incorrect. If all between the ages of eight and sixteen years have increased 86.4 per cent., the rate for the whole State must have been more than 40.44. These two returns are too far apart. One or the other is wrong. Either the school census has been padded, or the federal census has failed properly to enumerate the people. To suppose the first to be true, is to suppose the school enumerators guilty of fraud. But there could be no motive for perpetrating such a fraud. There was no money to be made by a fraudulent school census.

There was no party advantage to be gained. We must suppose that the children were in existence and that they were properly returned. If this is true, the federal enumeration is wrong. The result may have been produced by the neglect or incompetency of the enumerators or of others charged with the work. I state facts, and leave others to draw conclusions from them as they may. But whatever those conclusions may be, the State of Texas is deprived, by the incorrect returns, of at least three representatives in Congress and three votes in the electoral college. Estimating the total population by the same ratio of increase of children within given ages, Alabama loses 240,000, Tennessee and North Carolina 170,000 each, and Virginia, Kentucky, and Louisiana 100,000 each. In the States of the North and West the federal census exceeds the school census by about 800,000, while in those of the South the school census exceeds the federal census by 1,500,000. If we assume that in each State and Territory the highest number is approximately the true number, which I believe to be the case, the whole population of the United States is in the neighborhood of 65,000,000.

ROGER Q. MILLS.

## WILL MORALITY SURVIVE RELIGION?

WE learn that the year's earnings of a great telegraph company were sensibly increased by the Birchall affair. Thus was confirmed the saying that nothing else gives a community so much pleasure as a murder, except a case of clerical crim. con. But apart from the popular sensation of the crime and the trial, an ethical interest attaches to the character of this man, who, when he was not twenty-four, mounted the scaffold for a singularly cold-blooded and deliberate murder. Birchall was a perfect specimen of the moral, as well as of the religious, agnostic. As he was the son of a clergyman and had been well brought up, he must have been thoroughly enlightened, and cannot have been led into crime by anything like the brutal ignorance of moral law which is often the heritage of the gutter child. Nor does it seem that evil passion of any kind was overpoweringly strong in him. The attempts of the enemies of capital punishment to make out a case of moral insanity were in this case more faint than usual. It even appears that there was an amiable side to his character. His college companions liked him. He seems to have been a loving husband, and there was something touching and almost heroic in the effort which he successfully made, while he was awaiting execution, to master the fear of death and to write his autobiography for the benefit of his wife. The autobiography, it is true, is nothing more than the vulgar record of a fast undergraduate's life at an inferior college; but this does not detract from the nerve shown in writing it, and in illustrating it with comic sketches, beneath the shadow of the gallows. He only happened to have occasion for his friend's money. It is possible that if Birchall, instead of being sent to college—where a youth of his stamp was sure to be idle, and, being idle, to become dissipated—had been set to regular work in an office under a strong chief, he might have gone decently through life, though he would have been a very

selfish man. But he was a thorough-going agnostic in morals as well as in religion. Evidently he felt not a twinge of remorse for what he had done. No doubt he cursed his own carelessness in having, when he was destroying all the proofs of identity on the corpse, overlooked the cigar case, the name written on which gave the fatal clew; but the recollection of having killed a confiding friend for his money evidently gave him no more concern than as if he had slaughtered a bear for its skin. Bred a gentleman, he admirably preserved his dignity and impassiveness of manner when standing at bay against his pursuers, and he showed the same qualities for the two months during which a whole community was staring at him through the bars of his cage, when the least sign of weakness would have been at once proclaimed. When he was sentenced, he remarked, with a philosophy which appears to have been genuine, that life is short for all, and that there is not much difference between a term of a few months and one of a few years. He might have added that he would make his exit from life more nearly without pain than ninety-nine men out of a hundred.

We had a Birchall of a coarser type in England thirty-five years ago, in the person of William Palmer, the Rugeley murderer. This man was a country doctor and on the turf. He was a man of ability, popular and influential among his neighbors, as appeared when public justice began to draw its toils around him. But when he was unlucky on the turf, he was in the habit of providing for his pecuniary exigencies by the practice of slow poisoning, in which he was an adept. There was reason to believe that his own mother had been one of the subjects of his skill. At last he was compelled by untoward circumstances to hasten the process in the case of a friend, and the result was a post-mortem examination, followed by detection and the gallows. It did not appear that he was a male Brinvilliers, taking delight in poisoning, or that he was at all cruel in disposition, or even ill-natured. He seemed, on the contrary, to have been kind enough in the general relations of life. He poisoned his relatives and friends, after insuring their lives, only when it was rendered unavoidable by his financial obligations. Like Birchall, he was evidently a perfect moral agnostic. He behaved at his trial as if he had been watching a game of chess, showed not the slightest sign of remorse, and met death with perfect apathy, if not with Birchall's genteel composure.

As moral agnostics, these men were low specimens of a character of which the great Napoleon was the highest. Napoleon was not a cruel or an ill-natured man. He never displayed anything like the malignity of Eccelino, Bernabos Visconti, or Ivan the Terrible. There was in him a touch of Quilp, it is true, as he showed by kicking Volney in the stomach, by trampling on the feelings of Talleyrand, by persecuting Madame de Staël, and perhaps also by executing Palm. But as a rule he was rather good-natured. He was liberal, and constant in his favor to those who served him. He was capable, if not of friendship, at least of strong partiality. He could turn back to say a kind word to a groom whom he had struck in a passion. He commanded that the general who had lost the battle of Salamanca should not be questioned till his wound should be healed. Josephine he seems to have been kind, though, when policy gave the word, he had no compunction in casting off a loving wife, the founder of his fortunes, and wondered that she should make a fuss about the matter. He even showed sensibility, and spoke with pain of his having once, to amuse a courtesan, ordered a useless engagement in which a number of soldiers lost their lives. But he was a thorough moral agnostic. Conscience had no seat in his breast. He avowed that he would let no scruples stand in his way. He treated moral law as necessary to his government, but considered himself as a person above its domain. It is evident that he never stuck for a moment at any crime or atrocity which could serve his purpose. When his Turkish prisoners were in his way, he did not hesitate to have them, to the number of several thousand, led out on the sands and butchered. If he did not disencumber himself of his sick by poison, he avowed that he would have had no scruple in so doing. It is scarcely possible to doubt that he murdered Pichegru, while he certainly murdered the Duc d'Enghien, without, we may be sure, a touch of remorse in either case. The most enormous sacrifices of human life and happiness to his selfish ambition evidently never cost him a pang. He has left on record the expression of his

contempt for a man who was affected by the horrors of a battle-field, though Marlborough, steeled as he was, had prayed after Malplaquet that he might never be in another battle. His comment on the retreat from Russia was that a good many of those who had perished were Germans, while his bulletin announced that the Emperor had never been in better health. He was simply "The Prince" of Machiavelli, that prophet of moral ag nosticism. He answered to the ideal far better than Cæsar Borgia, who committed crimes of passion, which Napoleon never did. There was a jeu d'esprit in the form of a copy of "The Prince," supposed to have been taken in Napoleon's traveling carriage at Waterloo, with his comments. It brings out the affinity with remarkable force.

Each of the three men was manifestly an agnostic in religion. The chaplains could make nothing of Palmer or Birchall, neither of whom evidently had any belief in a God or in a hereafter. Napoleon said that he had never given a thought to religious questions, and that if he had he would not have been able to do great things. There is a story, repeated by Carlyle, of his rebuking the materialist savants by pointing to the starry heavens and asking who made all that. But this only implies his belief in a creative intelligence, not in a moral governor, if it implies anything more than that he wanted to snub the savants. He never showed his agnosticism more signally than in restoring, for a political purpose, a religion and a church in which he did not believe. He regarded with aversion not only everything spiritual but everything philosophical, and scoffed at all philosophers as idealogues, respecting nothing but positive science; so that Positivists may regard him as a precursor.

The agnosticism of Palmer may have been contracted in the dissecting room. That of Birchall may have been contracted either in English society, where there is now plenty of it, or at a university where, in the reaction after a long clerical ascendancy, extreme views of all kinds are rife. The character of Napoleon was formed by Corsica, with its barbarism and vendettas, by the atheism of the Revolution, and by the immorality, public and private, of the Directory.

Now the question which Birchall's case rather vividly pre-

sents to us is whether there is any logical connection between the religious agnosticism of these men and their moral agnosticism. Religious agnosticism is gaining ground, not so much perhaps in America as in Europe, because America is less speculative than Europe and because free churches do not provoke skeptical criticism so much as establishments; but everywhere religious agnosticism is manifestly gaining ground. Are we to expect a corresponding growth of moral agnosticism? We shall not have a crop of Birchalls and Palmers, still less of Napoleons; but may we not have a crop of men who will regard morality as a superstition or a convention, and will do what suits their own interest? Greece, after the fall of her religion, had the moral anarchy depicted by Thucydides and ascribed by him to that fall. She had the moral agnosticism of the Sophists. Rome, after the departure of the religious faith to which Polybius, in a famous passage, ascribes her public morality, had the immorality of the Empire. On the decline of the Catholic faith in Europe, ensued the moral agnosticism of the era impersonated in Machiavelli. In each case, into the void left by religion came spiritual charlatanry and physical superstition, such as the arts of the hieroplant of Isis, the soothsayer, and the astrologer—significant precursors of our modern "medium."

The saying that if God did not exist it would be necessary to invent him, was very smart but very silly. Nothing can be done for us by figments. Whosoever will be saved, before all things it is necessary that he keep his allegiance to the truth. We see what has come of Napoleon's politic invention of a God in France. The fruits are a frenzy of clerical reaction on one side and a frenzy of iconoclastic atheism on the other. Belief would have restored and readjusted itself better if it had been let alone. But if morality has hitherto been based on religion, there must be reason to fear that, the foundation being withdrawn, the superstructure will fall. That morality has hitherto been based largely on religion, so far at least as the great majority of mankind are concerned, will hardly be doubted, however wanting in definiteness or vividness the notions of a moral governor and of retribution may have been in many minds, and however men may have sacrificed to immediate impulse that which, on serious appeal, they would have acknowledged to be their real good. "Virtue," says Paley, in his clear and decisive way, "is the doing good to mankind in obedience to the will of God and for the sake of everlasting happiness." So surely thought even the men of the world in Paley's day. All but the members of the Hell-fire Club—and perhaps even they—would have said, "Let me die the death of the righteous, and let my last end be like his." Besides, such genuine Christian characters as there were, exerted an influence beyond themselves as practical warrants for the observance of Christian morality and as pledges of the happiness attending it.

The presence of the theistic sanction has been especially apparent in all acts and lives of heroic self-sacrifice or self-devotion. The man who has led a forlorn hope, taken an oar in a lifeboat, risked his own life to save the lives of others, or given up all his personal enjoyments to the service of his kind, if he has not definitely placed before himself the approbation of God and a reward in Heaven, has felt assured that in losing his life he should save it, and that it would be well for him in the sum of things—an assurance which implied the existence of a supreme moral power. We are told that acts of heroic self-sacrifice and self-devotion will become of less consequence to mankind when all shall be regulated by a scientific sociology. It may be so, but hitherto humanity could hardly have advanced without them.

While religious belief is unshaken, religion is in fact the sole moral code. To a primitive Christian, morality was the will of God, manifested in the character and life of Christ; though by "will" in this connection was meant, and is still meant, not mere fiat, as some anti-theistic critics suppose, but divine volition in accordance with divine nature. So it has been with the Jew, with the Mohammedan, with the early Greek, with the early Roman, and with all whose religious faiths have been sincere and unimpaired. With misgivings, conscious or unconscious, about religion, came the desire of finding a sanction for morality independent of theology; in other words, moral philosophy. Not that moral philosophy is antagonistic to theism, for most of the moral philosophers—all, indeed, whose philosophy has been practically effective—from Socrates downward, have been re-

ligious, and have regarded their philosophy as the ally and confirmation of religion. But they have all successively sought an independent sanction, or at least an independent demonstration. of morality; and in this they have not been successful, at least they have as yet arrived at no agreement. Where they take as their foundation the authority of conscience, the categorical imperative, or the command of nature, it is clear that they are still within the circle of theism. Conscience, as a mere evolution of tribal experience, may have importance, but it can have no authority, and "nature" is an unmeaning expression without an Author of nature, or rather, it is a philosophic name for God. Comtism, while it abjures theism, loudly proclaims itself a religion. A religion in fact it is, and, as has often been remarked, a reproduction of Roman Catholicism with Comte for the Messiah, and a calendar of historic saints. It indeed assumes the prerogative not only of a religion but of a revealed religion, since it bids humanity, which has so far been in constant progress, henceforth to stand still under the organization, social and religious, decreed for it by Comte.

Evolution is not moral, nor can morality be educed from it. It proclaims as its law the survival of the fittest, and the only proof of fitness is survival. The tiger has been as much evolved as the lamb, and the most noxious of human beasts, if he can hold his own in the struggle for existence, at whatever expense to his fellows, has as good a right to existence as Soc-The only question as to any act is whether it conduces to the preservation of the agent and to his "quantity of life, measured in length as well as in breadth "--to borrow Mr. Herbert Spencer's expression—in other words, to his length and intensity of enjoyment. At the utmost, the consequences of the act or of the course of life may be extended to the progeny of the agent. We are endowed with different dispositions, and if a man succeeds in gratifying his own tastes, lives long, and transmits a strong constitution to his children, evolution apparently has nothing to say against him. It may say to Birchall that he made a mistake in not destroying all the evidences of Benwell's identity, to Palmer that he made a mistake in exposing himself to detection by haste in poisoning Cook, to Napoleon that he

made a mistake in invading Russia; but it cannot rebuke or denounce any one of them in the name of morality. It may talk of the general interest of society; but, even supposing that it could bring the general interest of society clearly within the view of Birchall, Palmer, or Napoleon, he would ask upon what showing he was bound to prefer the interest of society to his own. Of course there is danger from the hangman, or from human resentment; but supposing this can be escaped, as it often may be escaped, there is apparently no more to be said. A man acquires a great estate by fraud, enjoys it wisely, uses his wealth liberally, makes himself popular, takes good care of his health, lives long, dies respected, and leaves healthy offspring. Freed by his opulence from wearing toil and injurious exposure, he exhibits all the energy, vivacity, and sociability which are held out as the rewards of a right course of living. Morality says that he is miserable, but how can evolution condemn him? Evolutionary philosophers give excellent precepts for healthy and comfortable living; but these precepts apparently the man fulfills, and thus he fulfills all righteousness. They may talk to him, indeed, of a more perfect state of society to be some day brought about by ethical science, in which he would be out of place; but he, having only one life, takes the world as he finds it, and makes the best of it for himself. Why should he sacrifice himself to the future of humanity? Evolution, being a quasi-mechanical and necessary process, will fulfill itself without effort or sacrifice on his part. And the perfect state, after all, will be attained only to pass away in the everlasting round of integration and disintegration, or whatever the wheel of existence may be called. Men of greedy and daring character who feel their force, will not be hindered from using it for their aggrandizement by arguments of the tea table. They will grasp, by all the means in their power, the largest share attainable of such enjoyment as may fall to the lot of beings always on the verge of annihilation—a drawback to which, by the way, in pictures of a secularist millennium, reference is seldom made.

My late friend, Mr. Cotter Morison, the most thorough-going of agnostics, says in his "Service of Man":

<sup>&</sup>quot;The sooner the idea of moral responsibility is got rid of, the better it

will be for society and moral education. The sooner it is perceived that men will be bad, do what we will, though of course they may be made less bad, the sooner shall we come to the conclusion that the welfare of society demands the suppression or elimination of bad men, and the careful cultivation of the good only."

In another passage he says:

"Virtue may, and possibly will, bring happiness to the virtuous man; but to the immoral and the selfish, virtue will probably be the most distasteful or even painful thing in their experience, while vice will give them unmitigated pleasure."

Mr. Morison's method, as we see, is "suppression and elimination." First catch your hare. The bad man may successfully resist suppression. Perhaps he may suppress the good. If he do, he will be perfectly within his right. His taste lies in one direction; that of the man who styles himself good lies in the opposite direction. But both tastes are equally natural, equally the offspring of evolution. Force alone, of muscle or brain, can decide to which of them the world shall belong.

The author of "Rocks Ahead," Mr. Greg, was a thorough-paced free thinker, but he saw the value of belief in a future life as a police force, and trembled for the consequences of its withdrawal. This is not the right way of looking at the matter; beliefs kept up as police forces are altogether odious, and are ruinous in their ultimate effect. But of the fact there can be no doubt. Philosophies such as that of Plato, and that of the Roman Stoics, of Marcus Aurelius, and of Epictetus, which imply some transcendental sanction for morality and inculcate self-sacrifice, as that of Plato does, to the extent of martyrdom, even if they do not definitely include belief in a future state, really imply it. It is absurd to say that a life of self-denial and endurance, ending in martyrdom, is happiness, unless there is compensation beyond.

We have in China and Japan examples of communities with a social morality sufficient at all events to hold them together, and without religion. Chinese religion appears to have nothing in it beyond some ceremonial observances, which are perfectly hollow, and a venerated social code. In Japan, such religion as there is seems to be of the lowest kind and confined to the lowest class. China and Japan, however, though agnostic, are not skeptical; they are still governed by tribal tradition, which has a quasi-religious force. I speak of the Japan of yesterday; the new Japanese civilization is imported from Christian countries, and is an experiment the results of which we have still to see.

We must remember that, whatever may be our philosophic school, we are still living under the influence of theism, and most of us under that of Christianity. We have inherited a Christian or a theistic code of ethics, and characters cast in a corresponding mold. This is particularly the case with regard to those gentler virtues the reverence for which is the special protection of the weak against the strong. There is no saying how much of theism, or even of Christianity, still mingles with the theories of agnostics. When the agnostic assumes that the claims of the community are superior to those of the individual, when he uses such a term as "conscientious," and even when he speaks with reverence of an "eternal source of energy and force," careful scrutiny of his expressions might discover a trace of theism. An infinity of mechanical or material power would be no object of reverence. The generation after next may perhaps see agnosticism, moral as well as religious, tried on a clear field. By that time, possibly, science, whose kingdom seems now to have come, will have solved in her own way the mystery of existence; at least so far as to provide us with a rule of life, personal and social. It is not likely that man will cease to inquire what he is, whence he comes, and whither he is going. The profession of safe acquiescence in ignorance may sound very philosophic; but man is inquisitive, and as often as he raises his eyes to the starry heavens his curiosity will be called into play. In the mean time society will be held together by established opinion, by municipal law, and by natural affection. But established opinion cannot forever survive the fundamental beliefs which gave it birth. The sphere of municipal law is limited, and it touches no one who can manage to evade its penalties. The influence of natural affection is limited also. Alexander Borgia was a very loving father, and filled the Vatican with his yells of anguish when he lost his son, the Duke of Gandia.

There is nothing pessimistic in this; no want of faith in the future of humanity, or in the benevolence of the power by which

human destiny is controlled. The only fear suggested is that society may have a bad quarter of an hour during the transition, as it has had more than once before. The withdrawal of religious belief must, however, one would think, have begun to operate, and some observers may be in a position to say what the effect is and how far philosophy or science has been able to fill the void. As the twilight of theism and Christianity still lingers, nobody expects a sudden change. Least of all does anybody expect a sudden outbreak of immorality among philosophers, whose minds are elevated by their pursuit and in whom the coarser appetites are sure to be weak; so that the sensitiveness which men of this class are apt to show, whenever a connection is suggested between religious and moral agnosticism, is out of place. But is any moral relaxation visible in the quarters where it might be expected to appear; say among the young men in the cities, or among the artisans who have quickness of mind enough to catch the popular skepticism of the day without having sufficient knowledge or power of mind to evolve anything for themselves, or to appreciate any progress which constructive science in the ethical or social sphere may have made? The late Bishop Fraser, of Manchester, was a remarkably candid man as well as a close observer, and his diocese, being full of active-minded artisans, afforded the best possible field for observation. He certainly believed that moral relaxation was visible. Perhaps in America the phenomenon, supposing it to exist, would be less apparent, because here the absence of any established church to chafe skepticism into violent antagonism to religion mitigates, as has already been said, the violence of disintegration. I think I have myself seen a case in which, when a youth of the most highlyeducated class, having been religiously brought up, embraced Positivism and cast away his religion, a great change of character followed, and a lapse into covetousness, unscrupulousness, and unveracity ensued. But a single instance goes for little. whose field of spiritual or social labor is among the clerks and mechanics of New York might be able to tell us more.

GOLDWIN SMITH.

## THE GROWTH OF SENTIENCY.

MULTIPLICATION is the primal lesson of living beings. If all the plants upon the surface of the earth should be destroyed except one young palm, one young oak, and one young pine, and these should be allowed to bear their fruits, and every seed should grow and reproduce its kind in a succession of generations, the palm, the oak, and the pine might live to see their progeny covering the whole earth. And the younger palms, oaks, and pines would stand so dense under the shadow of the taller forests that the world would be a jungle impenetrable to the larger beasts. Such are the powers of reproduction with which palms, oaks, and pines are endowed; and yet they do not equal those of many lower orders. This marvelous fecundity, especially in the lower forms, has played an important part in the evolution of plants, the nature of which must be understood. Few plant germs reach adult life. Every successful passage through the term of existence is offset by a multitude of failures. The life of the very few is secured by the martyrdom of the very many.

If many are called and few are chosen, how are the favored few selected? The answer is the modern doctrine of evolution; it is the principle of "the survival of the fittest in the struggle for existence"; it is the philosophy that Darwin embodies in the phrase "natural selection." Nature gives more lives than she can support. There is not enough food for the individuals requiring it, and only those live that obtain sufficient nutriment. There is not enough room for the growth of all the germs produced, and only those live that find a habitat. Of the multitude, some perish on the rocks, some languish in the darkness, some are drowned in the waters, and some are devoured by animals. The few live because they do not fall on the rocks, but are implanted in the soil; because they are not buried in the darkness, but are bathed in the sunlight; because they are not

overwhelmed by deep waters, but are nourished by gentle rains; because they are not devoured by the hungry, but dwell among the living. The few live, in other words, because they are the favorites of surrounding circumstances. In the more stately phrase of the philosophy of evolution, they are "adapted to the environment." But this general statement must be followed a little further, that its deeper significance may be grasped.

The earth, as the home of living beings, presents an almost infinite variety of conditions, and beings not adapted to one set of these may be adapted to another; so that a great variety of living forms are produced, suited to a great variety of circumstances. Plants are developed to live in air, on the land, and in the sea; in polar zones, in temperate lands, and in torrid regions; on mountains, on plains, and in valleys; in arid lands and in humid lands. The life which teems upon the earth is thus crowded into every available spot, and yet the fountains of life never fail. Every spring sends its stream into the flooded world. There is life for all the earth, and more life, and still more life; forever and forever it comes. Under such conditions of abundance, of wanton superfluity, the new-born plants are ushered into the world to compete with one another for continued existence. Thus the whole world of vegetable life is in a struggle; all plants are engaged in warfare one with another.

Let us look at some of the ways in which this competition is carried on. The plant must have air and water, for its food is the body of the wind and its drink the body of the storm; but food and drink are only the vehicles of life, not life itself. Plant life is sunlight, transformed and organized by air-fed tissue. The life of the forest, of the meadow, and of the mossy bank is drawn from the effulgence of the orb of day, for it is in the loom of the plant that the light of the sun is woven into life. For this light every plant struggles; toward the fountain every plant turns, that it may drink; aloft it lifts its head, higher and still higher above its fellows, and abroad it stretches its branches, and athwart the course of the sunbeams it spreads its leaves, that it may catch as much sunlight as it can. The plant that lifts its head highest, and spreads its limbs widest, and clothes itself with the densest verdure, is the successful competitor. Its

prosperity is its neighbors' adversity; its life is its neighbors' death. A shadow is the sword of a great tree, and with this weapon it slays a thousand. The life of one is the death of many. But those that drink from the fountain of life are the best of their race; those that are stricken with the shadow sword fall because they have less of plant excellence than their destroyer. It is a survival of the fittest; it is natural selection; it is evolution toward higher life.

Animals live on plants. They devour tissue and transmute vitality, and here the method of natural selection is reinforced. The sweetest and most nutritious plants become the food of animals; those that are bitter, those whose tissues are hard, those that are clothed with thorns, and those that secrete poisons, escape and live. So the plants that have killed their neighbors with shadow swords make defensive warfare on the animals that come to devour them; and the hard, the bitter, the stinging, and the poisonous are in the long run the successful competitors for life. The progress of the few is through the death of the many, and out of this progress are developed hardness, bitterness, piercing cruelty, and deadly poison. Time would fail to tell how plants bear flowers that ever become more graceful in form, more beautiful in color, and more delicious in perfume, through the agency of winged insects; how fruits become luscious and more luscious through the agency of birds of the air. But so it The tender and the hard grow on the same hillside, the beautiful and the ugly grow in the same forest, sweet odors and foul stenches arise from the same meadow, and salubrious and noxious fruits may be gathered from the same copse. The progress of the few is secured by the sacrifice of the many, and good and evil flourish in the same soil.

Turning to contemplate the evolution of animal life, we find facts of like character. If a barrel of oysters should be planted in an estuary of the sea and their progeny should all be preserved in successive generations for a decade, the oyster field thus produced would supply a bounteous repast for every man, woman, and child on the face of the earth. A multitudinous population is crowded into every possible region and place, and the fountains of life are ever flowing. A few may live, while

many must die. Besides the unconscious passive warfare of the plant, we thus have the designed and aggressive warfare of the animal, and all the world is at war. Air, earth, and sea are vast battlefields filled with animals large and small, flying through the air, prowling on the land, and swimming through the waters, on predatory forays—a world filled with all imaginary forms of life, all seeking whom they may devour. Those that fight best are saved; those that conceal themselves most deftly are preserved; those whose flight is most rapid reach protection. It is in this manner that many living beings are gradually furnished with defensive armor, and that defenseless beings grow sharp of vision, quick of hearing, and fleet of motion. Thus weapons of multitudinous forms are developed. Insects are provided with saws, knives, and stilettos; other creatures have teeth that pierce and cut and grind, and sharp beaks and talons and hoofs and tusks and horns; and some defend themselves with foul odors and deadly poisons. Strange, terrible, and loathsome are the many defensive and offensive devices of the animal world; and all these grow out of the struggle for existence. Competition among plants and animals is fierce, merciless, and deadly. Out of competition fear and pain are born; out of competition come anger and hatred and ferocity. But it must not be forgotten that from this same competition arise things most beautiful and lovely, such as the wing of the butterfly, the plumage of the bird, the fur of the beast, the hum of the honey bee, the song of the nightingale, and the chatter of the squirrel. So good and evil dwell together.

The prodigality of life in the lower forms and the competition which arises therefrom, lead to two results, namely, the differentiation of co-ordinate species and the development of higher forms. These results combined are known as evolution. Germs of life are carried by wind and water, by animals themselves, and by other agencies, and are distributed wherever air may be wafted, wherever water may flow, wherever walking animals may go, wherever winged animals may fly, wherever creeping animals may crawl, and wherever finned animals may swim. The mountain, the hill, the plain, and the valley are thus perennially covered with germs, and the moor and the fen are abundantly

supplied. The springs, the brooks, the creeks, the rivers, the lakes, and the seas are filled with germs. Seeds are carried even into most inhospitable places, such as caves and hot springs. Wherever they are carried they are developed, and gradually species are evolved adapted to all these varying environments. Thus arises a multiplicity of forms peculiar to the multiplicity of habitats. The mountain crag becomes the home of the dwarf, the opulent valley the home of the giant. The fiord has its denizens and the tropic sea its people. The rock is clothed with lichens and the ooze with moss. The sandy desert of the tropics has its fields of opuntia; the icy desert of the paleocrystic sea has its protococcus. In each habitat, by the death of those that fail in the struggle for existence, and by the preservation, from generation to generation, of those that develop the characteristics best adapted to environment, a serial progress is made. The new species developed have characteristics which constitute them higher beings in the scale of existence. These beings climb the ladder of life by rungs which, though separated by generations, are in fact so close together on the scale of progress that the minute degrees of evolution are indistinguishable when taken separately, and are only to be recognized in groups; as the motion of the hand on the dial is not marked by moments, but by hours. Yet germs and generations are plenty. Lives and years multiply, and all these bring the multiple changes which constitute transformation. By such processes of evolution species are differentiated and biotic life is developed.

The law of evolution which governs that mode of life called "vitality," is denominated "the survival of the fittest in the struggle for existence." Under its sanction diverse species are developed. Most of such species make little or no progress; a smaller number develop a higher life; and an ever-diminishing number of species bourgeon and grow still higher and higher, until only a few reach exalted position, and man alone crowns the column. The great efficiency of the law of the survival of the fittest depends upon the enormous multiplicity of individuals, which causes them to compete for life. If the germs developed should not be more than equal to the duty of supplying the waste caused by death, the rate of progress would be greatly

diminished, and life would become stationary, or nearly so. Other things being equal, the lower the form the greater the rate of reproduction; and steadily, as forms become higher, the rate of reproduction is diminished, until in the highest it is scarcely more than enough to supply the demands of current life. Under this law the rate of evolution becomes slower from age to age, with advancing development. The survival of the fittest gives hope to the worm, but despair to the man. It is a process which comes to an end; for the beings developed under the law ever become more complex, so that reproduction demands more and more of the energies of life, until a species is so highly developed that it can do no more than preserve its numbers, and has no surplus to be slain in the interest of progress.

Now the rate of progress is known to have been steadily accelerated from the earliest geologic time to the present. For many decades scientific men have been studying the life of the globe, as it has been entombed in the rocks from Algonkian time to the present. At first vast periods elapsed during which little progress was made, but from age to age the rate of evolution was increased until the higher animals appeared. Then a new era was inaugurated, and age followed age with greater and still greater activity, until, as we see in the Neocene rocks, forms were developed in ever shorter periods. The latest geologic times have been the theaters of the greatest biologic development. If this is true—and it is a well-established fact in pale-ontology—then some new method of evolution must obtain; a second law must be added to Nature's code of procedure. That law has been discovered; in fact, it was known first.

When animal life was evolved, sentiency was developed with it. The nervous system is the plexus by which the organs of the body are so correlated and made interdependent that they work together and assist one another. The organs feel with and for one another, and every one labors for the common good. If a larger share of effort is demanded from some organs than from others, such others recognize the fact by generously supplying the necessary materials of life. If the animal must escape by flight, its wings become the centers of interest to all the other organs, which become opulent donors of vitality. In this man-

ner the organs of flight are developed by exercise. If, in the battle of brutes during the struggle for existence, horns are brought into play for offensive or defensive purposes, under the guidance of sentiency all of the other organs pour their power into that one which has become for them the tower of defense. It is in this manner that animals grow unsymmetrically, the preference being given to those organs or parts which, under the circumstances, are of the highest importance; and the important part is that which is used, the development being in the direction of size, of strength, or of deftness, as the circumstances demand. Again, the conditions of life may be such that certain organs or parts are rarely used, and, being unused for the common good, they are neglected. From the unused parts the vitality is drafted to the used parts, and the former gradually, from generation to generation, become weaker, until they are atrophied. In the economy of organic or sentient life, the drone is doomed. Thus, by the effects of use and non-use, species are multiplied, and species whose development is in the most fortunate direction are lifted into higher planes of existence.

All this co-operation, leading to evolution as it does, is born of sentiency, and special organs of sentiency are slowly produced to perform special functions. The termini of the nerves become more efficient organs of touch when this sense is of advantage to the species, for the other organs willingly yield the vitality necessary for such development. When it becomes advantageous to the species that the animal should select its food properly, as it must at every feast, all the other organs yield vitality to those nerves that guard the portal to digestive life, and thus taste is developed. Whenever it becomes important to follow the track of the animal which is to be the source of food, or whenever, in the selection of food, odors can be made a guide, all of the organs yield a store of vitality to the nerves that guard the entrance to the lungs, and thus the sense of smell is developed. When enemies lurk under the veil of darkness, or announce their approach from afar in murmurs on the air, all the organs of the being become interested in the detection of sounds which the enemies may make, and supply to the organ of hearing all the life that can be used; thus organs of hearing are evolved. The light of day is used to signal the presence of food and drink, or to herald the coming of foe or of friend, and thus the watchful eye is the favorite of the community of organs; all yield to its need, and by constant use it attains to the highest development. Organs of sentiency, when gained, may be lost, for the ear unthrilled by sound must die, the eye unpulsed by light must expire.

Thus it is that all of the organs are developed through the

agency of sentiency, and that the special organs of sentiency themselves are most highly evolved, under the sanction of the law that the organ which is of the most important use to the animal, under the conditions which the environment presents, is the one exercised. The stimulus given to the evolution of special organs under this law results in the production of many monstrous, uncouth beasts, with disproportionate parts. Beasts of huge size are developed, because bulk alone sometimes gives mastery; but these monsters, though they often appear in the course of geologic history, are comparatively short-lived as species, since the undue tendency to monstrosity ultimately defeats itself. Animals of proportions adapted to special conditions do not persist with changing environment. As the conditions are in constant change, these marvelous animals are put at a disadvantage and are soon extinguished; but many develop special organs that prove to be of more permanent value, and such animals come to be most highly evolved. One set of organs of prime value is developed under the law of exercise; these are the organs of sense, because sentiency leads to percipiency and percipiency to volitiency. And that knowledge which arises through percipiency and that control of conduct which arises through volitiency, lead to higher species through evolution, until one species. man, stands at the head.

The "environment" under which the number of species increases and certain species make progress in the scale of being, means more than the physical conditions under which they exist. Besides the physical environment, there is a life environment. Each species has conditions imposed by other beings. Some plants are parasitic; and plants not only destroy one another, but protect one another. Then animal life is derived from plant life. Some animals are parasitic; some use others for their food; and

animals protect one another and destroy one another. It is thus that the environment has two series of complex conditions, one derived from physical nature and another from biotic nature. These conditions are multifarious and complex, and the plexus of causation is not easily unraveled; but they all work together for the survival of the fittest, and conspire in many complex ways to promote development by exercise. Some of these secondary laws, like that of sexual selection, play important roles, but for the purposes now in view they may be neglected. The co-operating law of heredity also has been left without exposition. This only can be said here: germs are not born of germs, but of adults, and thus the efforts of protracted life are handed down by inheritance. Adult generation is the fact observed, and it fully explains the effects produced. Germ generation is a fancy of the speculator who coins axioms about the unknown. Such hypotheses are valuable in science, but they must not be used as established principles for its foundation.

It has been seen that the law of selection becomes less and less operative as species become higher and higher. On the other hand, the law of exercise is more efficient with the progress of life forms. It is thus that the higher evolution of animals is chiefly dependent upon the law of exercise; and when the organs developed in this manner are of general and perpetual value, evolution proceeds in a geometric ratio. It should also be noticed that the law of exercise co-operates with the law of selection in securing the preservation of the fittest among those developed by exercise.

Under selection and exercise three results are effected: 1. A multitudinous host of living species is produced, covering the land, filling the air, and populating the sea. This gives rise to the science of systematic biology, in which the forms of species are studied in relation to their integral organs, and in which all are classified. 2. By the combined agency of selection and exercise, higher and ever higher species are evolved, in classes the members of which are connected by genetic lines. Thus, animal forms are arranged in series, or lines, diverging from the lowest to the highest. Many lines of evolution have ended, because the beings developed were not ultimately adapted to an evolving environ-

ment; but those most fortunately differentiated have continued to the present time, and their lines of genesis lead back to the beginning of life in Algonkian time. Thus animals are seriated; the succession of forms found in the animal, from the germ to the adult, is compared with the succession of forms found in the geologic series, and lo! it is an epitome of the same. 3. Living beings are adapted to environment, and this results in a geographic distribution of profound interest. The geography of life is one of the most alluring studies of modern science, for by it the laws of life are shown to be related to the laws of climate. The student in this field must be both a physicist and a biologist. He is interested, for instance, in the great ocean currents.

Now turn to contemplate the ocean vast: Wherever mariner is borne by mast, There mighty currents flow from clime to clime, Through torrid zones and zones of crystal rime.

Where out of polar fiords glaciers creep, There ocean rivers rise, and, plunging deep, Roll down the world to equatorial main, From iceberg seas to seas of hurricane.

And other rivers rise in seas of sun, And poleward far their spreading waters run, To give the bays and inlets sweeter calm, And bless the continents with zephyr balm.

His field also embraces all the wonderful movements of the atmosphere, set in motion by the revolution of the earth, diverted by the ever-changing effect of the sun, and still further influenced by the conformation of the land in continental plateaus and mountain systems. All elements of climate fall into his theme, with zones, altitudes, and depths; and the whole field of astro-physics lies in his way for exploration. With this he must study the conditions of life and the systematic groupings of animals. The domain of psychology also constitutes a part of his field, for the science of sentiency is the foundation of the science of psychology.

The plant has vitality, and perchance the beginnings of sentiency may be found in some species; but this mode of life is the primal attribute of animals. They feel pains and pleasures,

and have organs for the purpose. The struggle of the plant is for life, because its sole endowment is vitality. The struggle of the animal is also for life; but to this is added the struggle for happiness, because of the endowment of sentiency. As special organs for this purpose are evolved, the endeavor to secure happiness grows. Thus it is that the second law of evolution is developed by exercise in the endeavor to secure happiness. The animal endowed with the power of feeling pains and pleasures, constantly exercises not only its muscular organs, but still more its sentient organs. The animal flees from danger, and defends itself from attack. In the alembic of life, more vitality is evolved than is needed for the stern purposes of bare existence; so animals engage in sports, and the time is shared between toil and play. The cubs of the bear dance on the greensward; the swallow floats on the air with lilting wings of joy; the trout plays in the brook as if sunlight were elysium.

The life of the animal is one of great vitality, from the very lowest forms, seen only with the microscope, to the busy crowd of the city mart. This vitality is the chief source of the evolution of sentiency, which reacts upon the physical organs until sentient life and exercise seem to be one. All pleasures, all pains, all emotions, are expressed in activities. So far as human investigation can discover, they are only activities. Such is the teaching of the latest scientific psychology.

The evolution of life is accomplished in four stages. In the first mode of life, which is vitality, progress is made by the survival of the fittest in the struggle for existence. In the second mode of life, which is sentiency, progress is made by the development of organs in the struggle for happiness. In the third mode of life, which is percipiency, progress is made by the discovery of truth in the struggle for knowledge. In the fourth mode of life, which is volitiency, progress is made by the establishment of justice in the struggle for peace.

J. W. POWELL.

## MADAME DE STAËL.

Among the many important works which have lately been published on the Continent, reconstructing the history of France during the struggle of the Revolution and during the periods that immediately preceded and followed it, scarcely any have been so comprehensive, and not many have been so valuable, as "The History of the Life and Times of Madame de Staël," by Lady Blennerhassett. The author—a Bayarian lady who was an intimate friend and favorite pupil of Dr. Döllinger-has brought to her task a knowledge, which is scarcely rivaled in its completeness, of the French, German, English, and Italian literatures relating to the period; and she has produced a work of which it is in one sense the merit, but in another the defect, that it sweeps over a far wider field than might be expected from its title. It is seldom, I think, a judicious thing to confuse the provinces of history and biography by turning the life of an individual into an elaborate history of his time; and in the few cases in which this method has been successfully pursued, the biographer has selected as his subject some man like Cromwell, or Frederick the Great, or Napoleon, who was indisputably the chief mover of his age. When figures of less prominence are chosen, both the history and the biography are apt to suffer. The true perspective, or relative magnitude, of events is impaired, and the book is almost sure to lose something of its artistic charm and of its popularity. Mr. Masson, as it seems to me, committed a mistake of this kind in his "Life of Milton," when he grouped around the great Puritan poet—who, however illustrious, was certainly not the central figure of his time—a full and valuable history of the Commonwealth, and of large sections of the reigns of Charles I. and Charles II.

In like manner, a great part of the work of Lady Blenner-hassett is not biography, but history, and history of a very high order. Madame de Staël was so closely connected, in her own

person and still more through her father, with the early events of the French Revolution, that we accept with gratitude the admirable sketch of that period which Lady Blennerhassett has given us; but we should scarcely expect to find in a work primarily devoted to Madame de Staël full and masterly accounts of the ministry of Turgot, of the rise and teaching of the Economists, of the rival influence of the writings of Montesquieu and Rousseau on the French political character, of the effect of English influence and American example in preparing the Revolution, and of the part played by Germans and Swedes in French politics. At the same time, the pictures of the social and intellectual life prevailing in the different countries with which Madame de Staël was connected, and the full accounts given of a crowd of persons with whom she came into casual contact, though in themselves both interesting and valuable, often tend to divert the reader from the main subject of the book. In truth, Lady Blennerhassett has not been able to resist the temptation of a very full mind to pour out all its knowledge, and, while possessing many rare and brilliant literary gifts, she appears to me to want that restraining sense of literary perspective which gives biography its true proportion and symmetry. This defect has, I fear, diminished the popularity of a most valuable book. In the original German, and in an excellent French translation which was revised by the author and which I especially commend to my readers, the work consists of three very substantial volumes. There is also an English, and somewhat abridged, translation. A hasty reader will readily conclude that, in this short and crowded life, such a space is far more than should be allotted to a long-vanished figure which, though interesting and brilliant, was not of the first magnitude. But if he has the courage to persevere, he will soon discover that few modern books have lighted up in so many directions the political, social, moral, and intellectual history of a momentous period, and have exhibited at once so many kinds of talent and so wide a range of sympathies and knowledge. The complete competence, the firm, sober, and—if I may use the expression—masculine judgment with which Lady Blennerhassett has grasped the great political problems of the period of the Revolution, is not less conspicuous than

the truly feminine delicacy of observation and touch with which she has delineated social life in many different countries, and painted the finer shades of many widely-dissimilar characters.

Anne Louise Germaine Necker was born in Paris on April 22, 1766. Her father was at that time known only as a Swiss banker of high character and reputation, who had amassed a vast fortune and had come to Paris for his private affairs; but about two years after the birth of his daughter he was appointed to represent the interests of Geneva at Paris, and when she was ten years old he rose, for the first time, to a leading place in the ministry of France. Her mother had been the Mademoiselle Curchod whose charms and accomplishments had captivated Gibbon when he was a young man at Lausanne. Every reader of his autobiography will remember the famous passage in which he describes his engagement, the opposition of his father, and the resignation with which he "sighed as a lover, but obeyed as a son." M. d'Haussonville has published from the archives at Coppet some melancholy letters which show clearly that Gibbon exhibited more heartlessness and inflicted more suffering than might be gathered from his own stately narrative. But no lasting scar remained. After a few years of poverty and hardship, during which she was obliged to earn a livelihood as a schoolmistress, Mademoiselle Curchod found in Necker a husband who realized her fondest wishes; and when, soon after, she became the center of a brilliant salon at Paris, her former lover, then in the zenith of his fame, was often among her guests. Madame Necker did not always abstain from slightly-veiled allusions to the past, but it is pleasant to see that a warm and solid friendship seems to have grown up between Gibbon and both his host and hostess. A pretty anecdote is related of how, on one occasion, after he had left the house, they agreed in expressing the deep regret with which they looked forward to his approaching departure for England; when their little daughter, who was then just ten years old, gravely offered to prevent the catastrophe by marrying the illustrious, but by no means prepossessing, historian.

It was a saying of Talleyrand that he who had not lived before 1789 had never known the full charm of life. Germaine Necker grew up in the last bright flush of a society which had, perhaps, as many fascinations as any that the world has known. Her mother, however, though she occupied a prominent position in this brilliant world, was never altogether of it. She shared fully, indeed, its intellectual tastes, and had herself won some small place in literature. She threw herself ardently into its philanthropic movements, and especially into that for the reform of the hospitals. She formed a warm and true friendship with Buffon and Thomas. She corresponded with Voltaire, and attracted to her house most of the best writers of the age. But to the last she remained eminently and characteristically Swiss, and she never acquired the light touch, or the easy, pliant grace, of the true Parisian. She was a little cold, a little prim, a little pedantic, a little self-conscious. Neither her reserved manners, nor her strong domestic tastes, nor the vein of Puritanism that ran through her opinions, harmonized with the lax and skeptical society around her, and it was no sacrifice to her to exchange the splendors and the gayeties of Paris for her peaceful retreat on the Lake of Geneva.

In this, as in most respects, her daughter was very different. In her the Swiss element had altogether disappeared, and, as is often the case with the eminent child of eminent parents, her character shot out in directions wholly unlike both that of her father and that of her mother. She was not beautiful, though her dark and eminently lustrous eyes, beaming with intelligence, and her rich brown tint, gave some charm to her large and rather coarse features; while her massive shoulders, arms, and breast, her full lips, and the firm grasp of her vigorous hand, indicated a strong, frank, ruling, and passionate nature, overflowing with life and with many forms of energy. Her education was somewhat fitfully conducted, but she threw herself eagerly into literary enthusiasms. At fifteen we find her annotating Montesquieu. Raynal and Richardson were among her idols, but, like most of the more ardent spirits of her generation, her ideas and character were molded chiefly by the genius of Rousseau. Her first work of importance was an exposition of his doctrines, and his influence left deep traces on both "Corinne" and "Delphine." Her strong, sane judgment, however, her genuine humanity, and the moderating influence of her father, saved her from being swept

away, like Madame Roland and most of the disciples of Rousseau, by the sanguinary torrent of revolutionary enthusiasm; and in times of wild passion and exaggeration she usually exhibited a singular soundness and sobriety of political judgment. She was sometimes mistaken, but on the whole it may well be doubted whether there is any other French writer or politician of the period of the Revolution whose contemporary judgments of men and events have been more frequently ratified by posterity.

In this respect she was not of the school of Rousseau. In another and less admirable way she was curiously untouched by his spirit, for few superior intellects have been so openly, so utterly, insensible to the charms of nature. She once spoke of "the infernal peace" of her Swiss home, and she candidly acknowledged that if it were not for respect for the opinions of others she would not open her window to look for the first time on the Bay of Naples, though she would gladly travel five hundred leagues to make the acquaintance of a man of talent. On the borders of the Lake of Geneva, with one of the fairest scenes on earth expanding before her, she was incessantly pining for "le ruisseau de la Rue du Bac"—for the interest and the excitement of a society which had become the passion of her life.

Her gifts of conversation were very wonderful, and she had a wide range of sympathies, keen insight into character, and great power of describing it by a few vivid words. She had, however, no reticence or reserve, she made many enemies by her unbounded frankness, and she often fatigued or overwhelmed by her exuberant animal spirits and by the torrent of her words. At the same time, unlike most great talkers, she possessed to a very eminent degree the gifts of learning from others, of grasping the characteristic features of their teaching, of awakening sympathies, of dispelling bashfulness, and of kindling latent intellect into a flame. Few women combined so remarkably a sound and moderate judgment with extreme vividness and impetuosity of emotion. She admired deeply, and she generally admired wisely; her first judgments and impulses were almost always generous; and, although she was subject to violent gusts of passion, she could be very patient with those she loved. Through her whole life she was the warmest and most self-sacrificing of friends, and her few antipathies were singularly devoid of rancor. One of those who knew her best pronounced her to be "absolutely incapable of hatred."

She soon became the most attractive figure in the salon of Madame Necker, and as the health of her mother declined she became its central figure. Her rare accomplishments and her position as a great heiress naturally would have drawn many suitors around her, but in that age the determined Protestantism of her family was a formidable barrier. It appears from something that she wrote late in life to a German correspondent that, when a mere girl, she had come under the spell of Louis de Narbonne, who asked her hand, and with whom, in after years, she had relations which caused much scandal and which greatly colored her political life. The story that her parents at one time contemplated a marriage between her and William Pitt, on the occasion of his visit to France in 1783, was discredited by Lord Stanhope; but M. d'Haussonville pronounces it to be quite true, though there is no clear evidence that Pitt was apprised of the wish of the Neckers. She was then only seventeen, and her vehement protest against an English marriage nipped the project in the bud. In 1786, however, a marriage was negotiated for her with the Swedish ambassador, the Baron de Staël, who was at that time a special favorite of Gustavus III. It was a marriage into which but little affection entered, and twelve years later it ended in a separation. There was afterward, it is true, a partial reconciliation, and she was present with her husband when he died, in 1802, on the way from Paris to Coppet.

Her marriage gave her an independent position, and she mixed much in the politics of the early days of the Revolution. She corresponded regularly with the Swedish king, and formed intimate friendships with great numbers of the guiding politicians. The proudest moment of her life was in August, 1788, when, amid a transport of transient enthusiasm and extravagant hopefulness, her father was for the second time called to the helm. Her devotion to him amounted almost to adoration, and she would never acknowledge, what the rest of the world soon perceived, that, though excellently adapted to be minister in quiet, regular times, he had neither the daring, nor the insight,

nor the commanding power, that was needed to guide the bark of state through the fierce storms of the Revolution. She fully shared the enthusiasm with which the opening of the States General was received. She mentions that on that occasion she was watching the procession from a window with Madame de Montmorin, wife of the Minister of Foreign Affairs, and that as she expressed her delight, her companion said: "You are wrong in rejoicing; great calamities will follow from this to France and to us." The words were truly prophetic. Madame de Montmorin perished on the scaffold with one of her sons; the other was drowned. Her husband was murdered in prison during the massacre of the second of September. Her eldest daughter died in the prison hospital. Her youngest daughter withered away when not yet thirty, broken-hearted by the calamities of her family.

Madame de Staël, too, soon discovered that no millennium was at hand. She was an eye witness of the terrible scenes of the fifth and sixth of October, when Versailles was invaded by a half-famished mob, when the guards were cut down and beheaded, and when the royal family were brought captive to Paris. She clearly saw that all power was passing from the government to the clubs, and that the mob violence which reigned was either instigated or deliberately connived at by the very men whose first duty was to repress it. "These gentlemen," she once said, "are like the rainbow; they always appear when the storm is over." Under her influence the Swedish embassy became the chief center in which the "Constitutional Party" was organized. Narbonne and Talleyrand were then completely devoted to her. Segur, Choiseul, the Prince de Broglie, and other members of the party were constantly at her house; and at what were called her "coalition dinners" she brought them in contact with leading men of other groups. She had a conspicuous talent for inspiring, encouraging, conciliating, and organizing a party; and for some months she exercised a very real political influence. Her aim was a constitutional monarchy of the English type; but she came gradually to believe that a republic, or at least a change of sovereigns, had become inevitable. She never wavered in her devotion to liberty, order, and justice; but on minor questions she always exhibited a spirit of compromise which was very rare

in her age and in her country. "The true line of conduct in politics," she once said, "is always to be ready to rally to the least obnoxious party among your adversaries, even though it is far from representing exactly your own point of view." At the end of 1791 she had a moment of delicious triumph, when her favorite Narbonne became minister of war. Marie Antoinette, who disliked her, clearly recognized her hand. "Count Louis de Narbonne," she wrote to Fersen, "has been minister of war since yesterday. What a glory for Madame de Staël, and what a pleasure for her to have the whole army at her disposal!"

The triumphs of Madame de Staël, however, were very fleeting. Her father had fallen irretrievably, and in September, 1790, he passed almost unnoticed out of the country where, but little more than a year before, he had been welcomed with such enthusiasm. The ministry of Narbonne, to which she had attached her most ardent hopes, ended in four months, and before its conclusion her husband, whose views on French politics had been for some time diverging from those of his sovereign, was recalled. He was not, however, replaced, and Madame de Staël remained alone in Paris till September, 1792. Her position there was an extremely dangerous one. She had long been an object of incessant abuse in the royalist press, and now the red waves of Jacobinism were rising higher and higher, surging fiercely around those to whom she was most attached. Nothing in her life is so admirable as the courage with which, in this period of the Revolution, she devoted herself to saving the lives of the proscribed. Her purse was always open, and she often risked not only her fortune, but her life. The royal family had always disliked her; but she was filled with horror at the fate that was impending over them, and she herself organized a plan for their escape, in which, if it had been accepted, she would have borne a leading part, at the imminent risk of her head; and she afterward wrote an earnest and eloquent pamphlet in the hope of saving the life of the Queen. Sometimes by interceding with those in power, sometimes by concealing fugitives in the Swedish embassy, very often by large and timely gifts of money, she saved many. Her own life, at the time of the September massacre, was in extreme danger, and she at last fled to Switzerland. Coppet then became a

great center of refugees, and many of them owed their lives to her help. Among others, Narbonne appears to have owed his escape, in part at least, to her assistance, and she chiefly managed the escape of his daughter. She was for a long time completely under his charm; but he is said to have been irritated by her often tactless impetuosity, and especially by the manner in which public opinion regarded him as her creature, and he seems to have treated her with much ingratitude. There was no violent breach, but there was a separation, and a wound which was long and bitterly felt. Many years later, Madame de Staël, when praising the Prince de Ligne, said of him: "He had the manners of Monsieur de Narbonne—and a heart."

A short visit to England, in 1793, the death of her mother in May, 1794, and the publication of her first purely political work, "Reflections on Peace. Addressed to Mr. Pitt and to the French," were the chief events of her life during the next few months. In this work she dwelt with much force on the absurdity of supposing that any foreign intervention could restore what the Revolution had destroyed, and she predicted that the inevitable effect of the prolongation or extension of the war would be to strengthen that militant Jacobinism which was now the greatest danger to Europe. In this year, too, she first came in contact with Benjamin Constant, and her acquaintance soon developed into a connection which gave her a new and powerful instrument for acting on French politics, but which also brought with it much suffering, many reproaches, and long and lasting discredit. In May, 1795, we find her again in Paris, with her husband, who had once more been sent on a mission to France; again eagerly engaged in French politics; again largely occupied in defending the interests of her proscribed friends. Among others, Talleyrand appears to have owed his recall to her influence. As usual, she excited many antipathies, she was denounced in the convention by Legendre for her political intrigues and especially for her efforts in favor of the emigrants, and she was obliged to leave Paris for about eighteen months. Her pen was at this time very active, and to this period belong her "Essay on Novels" and her "Treatise on the Passions."

The star of Bonaparte was now rapidly rising, and it pro-

foundry affected the last years of her life. The pages in her "Considerations on the French Revolution" in which she describes her first interview with him, after the peace of Campo Formio, are among the most graphic she ever wrote, though something of the shadow of the picture was, no doubt, drawn from later experience and antipathy. She was at first dazzled; she was at all times profoundly impressed by his genius; but she soon came to perceive that his nature was wholly unlike that of other men. She had seen, she said, men worthy of all respect, and she had seen men noted for their ferocity; but the impression produced on her by Bonaparte was generically different from that produced by either of these classes. She found that such epithets as "good," "violent," "gentle," and "cruel" could not be applied to him in their ordinary senses. He was in truth a being who stood self-centered, and apart from the sympathies, passions, and enthusiasms of his kind, habitually regarding men, not as fellow creatures, but as mere counters in a game; a will of colossal strength; an intellect of clear, cold, transcendent power, solely governed by the imperturbable calculation of the strictest egotism, and never drawn aside by love or hatred, by pity or religion, or by attachment to any cause. It was impossible, she found, to exaggerate his contempt for human nature and his disbelief in the reality of human virtue. A perfectly honest man was the only kind of man he never could understand. Such a man perplexed and baffled his calculations, acting on them as the sign of the cross acts on the machinations of a demon. The superiority which so clearly shone in his conversation was not that of a mind cultivated by study and by society; it was the supreme insight into the circumstances of life possessed by a mighty hunter There was something in him, she said, like a cold and trenchant sword, which at the same moment could wound and chill.

Such was the estimate she formed of the man who, nearly at the same time, was presented by Talleyrand to the Directory as "the pacificator of Europe," as a hero "who despised luxury and pomp—the wretched ambition of common souls—and who loved the poems of Ossian, especially because they detach men from the earth"! That two such different natures should come into collision was very natural. Bonaparte always hated superior

women, and especially women who meddled in politics. He well knew that the circle of Madame de Staël was the center of ideas about freedom and constitutional government irreconcilably opposed to his ambition, and that the world of good society and good taste, of independent thought and independent characters, in which she played so great a part, remained unsubdued and undazzled by his power. Benjamin Constant had been placed in "the Tribunate," and in the beginning of 1800 he made a speech there indicating a desire to establish in that body an opposition like the opposition in the English Parliament. Bonaparte was furious at his attitude, and at once ascribed it to the inspiration of Madame de Staël. A year later the last work of her father appeared, and it contained an earnest warning against growing despotism in France and a strong argument for the establishment of a republican constitution. The sayings of Madame de Staël that were repeated from lip to lip, and the atmosphere of thought that grew up around her, irritated and disquieted Bonaparte. "She is moving the minds of men," he said, "in a direction that does not suit me." "They pretend that she does not speak of politics or of me, but somehow it always happens that those who have been with her become less attached to me." Soon her salon was emptied by an emphatic intimation that those who entered it would incur the displeasure of the First Consul. Official scribes were busily employed in depreciating her, and these measures were speedily followed by the long exile which darkened the later years of her life.

It is impossible for me in this article to relate, even in outline, the story of this exile, and of her travels in England, Italy, Austria, Russia, and, above all, in Germany. Madame de Staël has herself described this period of her life in her "Ten Years of Exile," and all the details have been collected by Lady Blennerhassett with an industry that leaves nothing to be desired. A woman of a more heroic type would have borne with less repining an exclusion from Paris life which was mitigated by wealth, and fame, and abundant occupation, and a family that adored her, and troops of admiring friends. A woman who was less essentially noble would have assuredly accepted the overtures that were more than once made to her, and would have pur-

chased her peace with Napoleon by burning a few grains of literary incense on his altar. But though, in a life of more than common vicissitude and temptation, Madame de Staël was betrayed into great weaknesses and into some serious faults, she never lost her sense of the dignity and integrity of literature, and her works are singularly free from unworthy flattery as well as from unworthy resentments and jealousies. The homage which Napoleon desired was never received, and in her great work on Italy and her still greater one on Germany there was no trace of his victories, influence, or animosities. "In France," he once said, "there is a small literature and a great literature; the small literature is on my side, but the great literature is not for me."

The disfavor which thrust Madame de Staël out of political influence, and then drove her into exile, proved a blessing in disguise, for it turned her mind decisively from political intrigues to those forms of literature in which she was most fitted to excel. Her treatise on "Literature," which was published in 1800, was conceived upon a scale too large for her own knowledge, and though she herself attributed to it the great and general favor that she enjoyed for a time in Paris society, it has not taken an enduring place in French literature. "Delphine," the most personal, and also the most censured, of her novels, had a still wider success, and made a deeper and more lasting impression. It appeared in 1802, and it was followed by a long interval, during which she appears to have published nothing except a short but admirable notice of her father, who died in the Spring of 1804; but in 1807 "Corinne" burst upon the world, and at once obtained a European fame equaled by that of no French novel since "La Nouvelle Héloise." In this great work of imagination she embodied, in a highly poetic form, the impressions she had derived from her journeys in England and Italy, and its immense and instantaneous success placed her on the very pinnacle of fame. It is worthy of notice that a bitter attack upon "Corinne" appeared in "Le Moniteur," based chiefly upon the fact that its hero was an Englishman; and there is good reason to believe that this attack was from the pen of Napoleon himself.

A book of larger scope and of more serious influence soon followed. Germany at this time presented the singular spectacle

of a people who had been reduced to the lowest depths of political depression, but who, at the same time, could boast of a contemporary literature that was the first in the world. In France a translation of "Werther" had attained great popularity; some of the plays of Schiller, the idylls of Gessner, and a few other German works were well known; but scarcely any Frenchman had a conception of the magnitude and importance of the intellectual activity which was growing up beyond the Rhine, or of the vast place which Goethe, Schiller, and Kant were destined to take in European thought. It was one of the chief pleasures and occupations of Madame de Staël, during her exile, to explore this almost unknown field. It would scarcely have been thought that she was well fitted for the task. She learned the language late in life, and her characteristically French mind seemed very little in harmony with either the strength or the weakness of the Teutonic intellect. There was nothing very profound, or very subtle, or very poetical in her nature, and she had all that instinctive dislike to the vague, the disproportioned, the exaggerated, and the ambiguous, to fantastic and far-fetched conjecture, and to imposing edifices of speculation based upon scanty or shadowy materials, that pre-eminently distinguishes the best French thought. Very wisely, however, she placed herself in direct communication with the great writers of Germany, and a wholly new world of thought and sentiment gradually opened upon her mind. It is not too much to say that it was her pen that first revealed to the Latin world the intellectual greatness of Germany. In England Coleridge had already labored in the same field, and his admirable translation of "Wallenstein" had appeared as early as 1800; but it had been completely still-born, and in England also it was reserved for the great Frenchwoman to give the first considerable impulse to the study of German literature. For the history, the merits, and the defects of her work on Germany, I cannot do better than to refer to the admirable pages which Lady Blennerhassett has devoted to the subject. With the doubtful exception of "Le Génie du Christianisme," it was by far the most important French work which appeared during the reign of Napoleon. It is a characteristic fact that the whole of the first edition was confiscated by order of his government.

Happily the manuscript was saved, and about three years later it was printed in England.

After some discreditable scenes, on which a recently-published correspondence has thrown a painful though somewhat doubtful light, the connection of Madame de Staël with Benjamin Constant was broken. The two continued occasionally to correspond, and as late as 1815 we find her lending him a large sum of money; but their relations were never again what they had been, and on the side of Constant there appears to have been a large amount of positive malevolence. "O Benjamin," she wrote to him in one of her later letters, "you have destroyed my life! For ten years not a day has passed that my heart has not suffered for you—and yet I loved you so much!" A strong affection, such as she had not found in her marriage with the Baron de Staël, was an imperious necessity of her existence, and after her breach with Constant she soon found an object in a young officer from Geneva named Rocca, who had returned to his native town badly wounded after brilliant service in Spain. When they first met, in 1810, Madame de Staël was forty-four and Rocca about twenty-three; but a genuine and honorable affection seems to have grown up on both sides, and in the following year they were married. Madame de Staël, however, either clinging to her name or dreading the ridicule of such a strangelyassorted marriage, insisted upon its concealment, and Rocca generally passed in society as her lover. A child was born in 1812, but it was only after the death of Madame de Staël that the legitimacy of the connection was established. It proved much more productive of happiness than might have been expected, and greatly brightened her closing years. Nearly at the same time an important change passed over her religious views, and the vague deism of her youth deepened into a positive, definite, and earnest Christianity, but without mysticism and without intolerance. Some beautiful lines that are cited by Lady Blennerhassett very faithfully express the spirit of her belief:

"Il faut avoir soin, si l'on peut, que le déclin de cette vie soit la jeunesse de l'autre. Se désinteresser de soi, sans cesser de s'interesser aux autres, met quelque chose de divin dans l'âme."

She lived to see the downfall of perhaps the only man she

really hated, his return from Elba, his final defeat at Waterloo. and the restoration of the Bourbons. But, though she detested Napoleon and his system, these things gave her no pleasure. The spectacle of an invaded and a dismembered France aroused her strongest feelings of patriotism, and she loved liberty too truly and too ardently to rejoice in the influences that triumphed in 1815. Her last years were chiefly spent in the composition of her "Considerations on the French Revolution," in which she sums up the convictions of her life. It is one of her most valuable and most lasting books. The disproportioned prominence which is naturally assigned in it to Necker, and the manifest personal element in her antipathy to Napoleon, impair its weight, indeed, as a history; but few writers have criticised with more justice the successive stages of the Revolution, and few books of its generation are so rich in political wisdom. cluding chapters, in which, in a strain of noble eloquence, she pleads the cause of moderate and constitutional freedom, show how steadily and how strongly, in an age of many disenchantments, she clung to the belief of her youth.

The "Considerations on the French Revolution" had a vast and an immediate success, and in a few days 60,000 copies were sold. Madame de Staël, however, did not live to witness her triumph. In February, 1817, she was struck down by a paralytic illness, and on July 14, after a long period of complete prostration, she passed away tranquilly in her sleep. It was a peaceful ending to an agitated and checkered career. She had enjoyed much and suffered much. She had committed grave faults, and had met with her full share of disappointment and ingratitude; but few women have left such an enduring monument behind them, or have touched human life on so many sides and with so many sympathies.

W. E. H. LECKY.

## FORMATIVE INFLUENCES.

IF we accept modern theories of heredity to their fullest extent, we must admit that the influences which form the man may begin to act generations before his birth; but I know nothing of my ancestry that would fully explain the early bent of my mind, or the direction which the activities of my life have taken. Both my parents were of New England descent so pure that I have to go back four or five generations to discover an ancestor of European birth; but I cannot find that any of my progenitors within the last two centuries was a laureate of Harvard or of any other college, or acted a prominent part in the history of his country. The first Simon Newcomb, from whom I am a descendant in the sixth generation, was early in the last century a Connecticut farmer or fisherman, and my grandfather, the fourth of the name, is reached before anything appears to suggest the seeds of the intellectual life. He was a stone-cutter by trade; but he owned a copy of the "Elements" of Euclid, and tradition credits him with unusual learning, and with having, at some time, taught school. My maternal grandfather was of higher social position—a "squire," a Puritan of the strictest sect, and a pillar of the Baptist Church.

My birthplace was in the northern part of Nova Scotia, and the surroundings of my childhood and youth have deeply tinged the economic views of my later years. People lived there much as the settlers of New England lived before the Revolution. The children of all but the rich went barefoot in Summer, and, except the rare and costly Sunday suit, nearly every family had to make its own clothes. The men and boys tilled the ground, or cut and sawed lumber for exportation to more favored climes; the women and girls sheared the sheep, carded the wool, spun the yarn, wove the homespun cloth, and made the clothes. My father followed the occupation—rather precarious in such a locality—of teaching school. In his ideas of

education he was a disciple of William Cobbett—a circumstance which did not tend to give him popularity or to promote his success. The learning of arithmetic and grammar by the glib repetition of rules was a system that he held in contempt, and in consequence parents were seldom fully satisfied with the results of his teaching. It thus happened that my early years were passed in a number of places, in all of which, however, the economic and social conditions were much the same.

One result of my father's occupation was that I breathed, in early childhood, an atmosphere which had at least the scent of learning. The spelling book was more familiar than the plow, and the idea that there was a correct way of using language was acquired at as early an age as if we had lived in cultivated society. When I was five years old, my father used in Winter to draw me to school on a hand sled, and at six I had developed a strong taste for "doing sums." Six months later I was well advanced in arithmetic, and then an incident occurred that profoundly affected my father's policy in conducting my education. I have no distinct recollection of it, but was accustomed to hear it alluded to as an attack of mental abstraction of a singular kind. Many years afterward my father wrote:

"You had lost all relish for study, reading, play, or talk, and sat most of the day flat on the floor or hearth, or in a corner. When sent on an errand, you would half the time forget what you went for. You would frequently jump up from the corner and ask some curious question. . . . From the time you were taken down until you commenced recovery, about a month elapsed. . . . After a few weeks I began to examine you in figures, and found you had forgotten nearly all you had ever learned."

This supposed result of overstudy made my father extremely cautious in allowing me the use of books. Of regular schooling—sitting down to prescribed tasks, reciting lessons, and passing examinations—it might almost be said that I had none. Partly from necessity, partly from a fear of overstudy and a desire to strengthen my bodily constitution, about half of my time from the age of eight to that of sixteen was spent in working on farms. The more intelligent of the farmers generally had two or three books, which I had occasional opportunities to read by the light of the blazing fire in Winter evenings. During the inter-

vals at home I had better opportunities for reading, and when I was twelve years old my father started me in algebra. His sole knowledge of the subject was derived from Hammond's "Algebra," one of the ancestral volumes already alluded to—a ridiculous work from our present point of view, and even then nearly a century old. If I remember the author's introduction aright, he had written the book for some of his friends, who could not grapple with the ordinary treatises on the subject.

Under such conditions as I have described, important epochs in the moral and intellectual development of a boy may be marked by circumstances which, in spheres now familiar to us, would have been quite unimportant. Three such epochs are prominent in my memory. At the age of five years I was guilty of a fault the precise nature of which has escaped me, but I think it was the telling of an untruth. My mother reasoned with me somewhat as Paul did with Felix, and awoke, for the first time, the faculty of conscience. From that time forward my discernment of right and wrong was keen. I have always regarded this little incident as possibly containing a hint of the direction in which we should look for the development of the moral sense in infancy. Is there a particular epoch in each life, after the age of entire thoughtlessness, and before that when mental habits have crystallized, when the iron is hot, so to speak, and when the character can be hammered into any required shape? merely suggest this question without attempting to answer it.

Up to the age of twelve the laws of nature remained a mystery to me. About that time I remember once asking my father what light was, and why we could not see in the dark. He tried to give me an idea of something he had read or heard on the subject, but the question was one which nothing in our reading could help to answer. He could tell about gravitation, the names and order of the planets, history, and navigation; but I doubt if a work on natural philosophy had ever fallen within his reach. But one day after school I saw, lying on the desk of one of the scholars, an unusual-looking book, which proved to be Mrs. Marçet's "Conversations on Natural Philosophy." I devoured it in a very few days, by stealthily making my way into the school house after hours. Never since have I tasted

such intellectual pleasure as was offered by this first insight into the mysteries of nature.

One of my grandfather's books was the "Elements" of Euclid. It stood on the shelf with Hammond's "Algebra," and with Moore's "Navigator"—the precursor of our familiar Bowditch—but until I had passed the age of thirteen I never noticed that there was anything of interest in it. How I could have lived so long without trying to fathom the mystery of its queer diagrams, I cannot now explain. I was led to a more careful examination by a reference in Hammond's "Algebra" to the celebrated forty-seventh proposition of the first book, and was equally surprised and delighted to find a course of reasoning from self-evident principles. Very soon I found something not self-evident taken for granted, but I soon discovered that certain numbers in the margin referred to a previous proof. Thus I went back, step by step, to the beginning of the book. It was my first idea of a mathematical demonstration, and I was so delighted with the new world of thought that, walking out with a younger brother, I imparted the new idea to him, demonstrating the principal theorems leading to the Pythagorean proposition by diagrams penciled on the ends of the logs in a pile of wood. Algebra I had found hard, but here was something so easy that a child might understand it. When I reached the fifth book, however—that on proportions—the prolixity of the propositions and demonstrations tired me completely; and as I was reading solely for love, I did not follow the subject much longer.

Notwithstanding that I had health, and a liking for every

Notwithstanding that I had health, and a liking for every kind of activity, physical and mental, my early life was a period that I would not live over again. The feeling that I was unfit for the sphere to which fate had condemned me, oppressed me from a very early age. I was looked upon by the farming population as a prodigy of learning, and was occasionally complimented by a preacher. This was pleasant; but when, as sometimes happened, one person said to another, "Look at that boy; he has more larnin' than any grown man miles 'round," I felt as if he were pointing out some hideous deformity in my constitution. In my own eyes I was a lusus natura, born with a taste for things which were of no use, and without any of

the powers necessary to gain a respectable living. I had, indeed, acquired an idea of another kind of world— world of light, where lived men that wrote books, and people who knew men that wrote books; and where boys went to college instead of having to drive oxen. But I never for a moment suspected that people in that world cared for people outside of it, or would take any interest in a boy because he was fond of knowledge. My father had, from time to time, inquired into the possibility of getting me prepared for college, but was always met with a blank statement of such impossibilities as six years at school, spent in the study of Latin and Greek. And thus it happened that I attained the age of twenty-one without meeting a college professor, or any one else who could give me help or advice in the pursuit of my studies beyond the point where parental guidance ceased.

Meanwhile my father had brought me to Maryland, where, before reaching nineteen, I was engaged in teaching, in a region far superior, in respect to the good things of life, to that in which I had been born, but nearly as far removed from contact with the intellectual world. Here I read in the "National Intelligencer" an elaborate attempt to refute the Copernican system of astronomy, and was quite surprised, after waiting some days or weeks, to find that no one ventured to point out the writer's fallacies. Fearing that sound knowledge was in danger, I at length ventured on a reply, which, in due time, appeared in the "Intelligencer" over my own name. This was about May or June, 1855. It provoked two pleasing attentions—a book from Col. J. J. Abert, of the topographical engineers, and a letter and a pamphlet from Professor J. Lawrence Smith. I was not yet in the world of light, but I felt like one tapping on its walls and getting answering taps from within.

A year later I found, for the first time, an opportunity to make the personal acquaintance of a denizen of that bright and happy world. I had made several visits to Washington, gained access to the Smithsonian library, and looked with awe upon the ponderous tomes of the "Mécanique Céleste." At length I ventured to call on Professor Joseph Henry, who, needless to say, encouraged and promoted my advancement in a way which will make his name ever remembered by me and my children. He made

me acquainted with Mr. J. E. Hilgard, of the Coast Survey, in whom I found another charming personality. Fate now seemed to make amends for her former neglect, not only by leading me to such men as she did, but by guiding them in building for me better, perhaps, than they knew. When, in the course of time, they found an opening for me in the "Nautical Almanac" office, then in Cambridge, it was simply because here was something congenial for me to do, and without a thought of the benefits that I might derive from Harvard University.

I date the fruition of my hopes, my actual citizenship of the world of my childish dreams and youthful aspirations, from one frosty morning in January, 1857, when I took my seat before a blazing fire in the "Nautical Almanac" office, between Professor Winlock, the superintendent, and Mr. John D. Runkle, the senior assistant. I began to talk of the "Mécanique Céleste" and of my nearly unavailing attempts to master it. When I said something of the translator, Runkle called him "the Captain." Such familiarity with the memory of Nathaniel Bowditch, LL.D., Member of the Royal Societies of London, Edinburgh, and Dublin, quite shocked me. I looked with awe upon the assistants who came and went, supposing that each of them had the "Mécanique Céleste" at his fingers' ends. One of the unwelcome lessons that I had to learn was that this was not the case, and that all my duties could be performed without knowing anything of the abstruse mathematics by which the mysteries of the celestial motions were unfolded. Yet among my associates were men of ability, and the roll of those who may be said to have graduated from the office includes a number of distinguished names. Runkle was the founder of the "Mathematical Monthly," in the preparation of which several of us co-operated. Although it lasted only three years, it had an excellent effect in stirring up an interest in the subject among students and professors in every part of the country. The interest of the assistants was not confined to mathematics and astronomy. Had Chauncey Wright lived, he might have stood high among the philosophers of the world; his "Philosophical Discussions" contain some of the profoundest examinations of the Darwinian theory that have yet appeared. I shall always remember him as the only man, so

far as I know, whose theories I ever changed by argument. After much wrestling on the subject of the freedom of the will, he was led to accept the logic of Jonathan Edwards and John Stuart Mill.

Was all this the beginning or the end of formative influences? The former, I hope, because in that case it is allowable for me in this paper to recall my indebtedness to the men who welcomed my entrance into their world, and who guided my yet almost childish footsteps. I had to learn what that world was, and could not have fallen in with better teachers. One object of my ambition had been to study mathematics in the Lawrence Scientific School under Professor Peirce, and I soon found that there was no obstacle in the way of my doing so while continuing my office work. Among those with whom my entry into the school made me acquainted, were E. N. Horsford, the dean, and Charles W. Eliot, then tutor in mathematics. My reception by each of these men was so pleasant that I have never forgotten it, and it was instructive and stimulating at the same time. I learned that the denizens of the world of light were ready to greet a new-comer with a warmer sentiment than I had supposed, even if his appearance showed that he had come from a different sphere; and of course I felt a yet stronger incentive to show that no mistake had been made in admitting me to the privileges that I now enjoyed.

The man who differed most from his fancied picture was Professor Peirce. Through one of those psychological fancies to which Mr. Francis Galton has called attention, I had associated eminence as a thinker with a smoothly-shaven face and a demeanor of studied reserve and dignity. With my introduction to the actual mathematician, "bearded like the pard," simple and unreserved as a farmer, and as cordial as if he had never known what dignity was, a new lesson in human nature was begun. The course of mathematics on which I entered under his nominal direction was hampered by no prescriptions whatever. The student was advised to attend the mathematical lectures that the professor delivered to the senior undergraduates, and to read La Place; outside of that he did what he pleased till he came up for final examination for a degree. The lectures

were not, in themselves, well adapted to one who had yet to learn the spirit of real mathematics. Peirce flew where I had to climb, and in whatever direction we went, a point was soon reached where the pupil had to drop behind. But what he said was always suggestive, and the effort to find out what he meant was improving, whether successful or not.

The leading scientific men at Harvard were Agassiz, Peirce, and Gould, each not only pre-eminent in his department, but in a certain sense a pioneer. Peirce was the first American to learn modern mathematics, and to teach his countrymen that what they called by that name hardly formed even the beginnings of the subject; and the same may be said of Gould in astronomy. The latter is one to whose encouraging words and efficient help I must ever feel most deeply indebted; indeed, the way in which the man and the astronomer were combined in his person powerfully influenced the direction of my activities, and his "Astronomical Journal" was the medium through which my earliest efforts reached publicity. Another teacher by example was Commander Charles Henry Davis, who resumed his former position as superintendent of the "Nautical Almanac" the year after I became connected with it. He united all the dash of the old-fashioned naval leader with a kindly courtesy toward men and women of every grade which could not be exceeded. The letter to the Mayor of Memphis in which, some years later, he called for the surrender of that city, after a day of fighting, was quite characteristic. "Sir: I have the honor to request that you will surrender. . . . I am, Mr. Mayor, with high respect, your most obedient servant." Had I been a son, he could not have promoted my work more cordially than he did, or given me better opportunities for advancement.

Agassiz was one of three men who impressed me by a certain artless dignity which made their presence both instructive and charming, as if they had never known what breeding was, because they had been born bred. The other two were Professor Henry and Chief Justice Waite, each of whom left a gap in the intellectual society of Washington which one can never feel to be filled.

High on the list of those to whom I was indebted at that criti-

cal period, must be written the name of a Lycidas whose untimely end, a few years later, I have never ceased to deplore-William P. G. Bartlett. Somewhat my junior in years, and then a senior in the college, he supplied one of my greatest needs, that of a companion who had been bred in the world which I had but entered. He was a member of a charming and cultured family, in which I soon became a familiar visitor. His virility of judgment, uncompromising integrity, and devotion to science, were but feebly indicated in his class motto: "I love mathematics and hate humbug." He was a nephew of the late Nestor of the Boston bar, who was naturally interested in the welfare of so gifted a kinsman. "I had a long talk with my uncle Sidney last evening," he once said to me. "He is trying to persuade me to study law, and says that wealth and a high position in the esteem of the community at large are better worth striving for than mere knowledge. But I told him that I would rather stand high in the esteem of a dozen such men as Cayley, Sylvester, and Peirce, than in that of all the ordinary people in the world."

Altogether, the accidents by which, at a critical period, I came under the influence of such men as I have described, seem nearly as noteworthy as those which so long kept me from them. Of the littleness and selfishness of the great world I have had as little cause to complain personally as one well could have, yet one has to learn about them. An excellent preparation for this inevitable experience is a few years of life in a world which says: "What you learn, that shall you know; what you make yourself, that shall you be; what you earn, that shall you enjoy; what you are fit for, that shall you do."

SIMON NEWCOMB.

## THE METHODS OF MIND-READERS.

The credulity of the American people has often been imposed upon. The Locke "Moon Hoax," the Cardiff giant, Katie King, Ann O'Delia Diss Debar, and Madame Blavatsky have been followed by the modern "mind-reader," who claims for himself powers of divination excelling anything that has been known since the time of Christ. Mind-reading, in the sense in which the word is used by those who pretend to possess the alleged power, may be defined as the transference of a thought—that is, a mental concept, or an idea—from the mind of one person to the mind of another, without the use of the known mediums of communication, which consist of the nerves of general sensation and those of special sense.

Mind-readers claim that this feat is possible. In opposition to such claims, I submit that profane history contains no trustworthy account of its accomplishment. It never will be brought about so long as man remains constituted as he is at present. It is opposed to the principles of evolution, and to all known facts of physiology. Notwithstanding all that may be adduced to the contrary, many believe that mind-reading is one of the possibilities, even if it is not one of the actualities, of life. But the belief, in every instance, is founded either on insufficient evidence, or on faulty observation, or on a disposition to mistake the marvelous for the miraculous. Many accounts of alleged mind-reading are purely fictitious. Others are exaggerations of trivial incidents or misinterpretations of observed phenomena. Others, still, are accounts of muscle-reading. Those cases that do not belong to the classes named are accomplished by trickery.

Mind-reading is not of recent origin. In 1847 a lad named Alexis Didier, living in Paris, attracted attention by reason of the remarkable powers that he was supposed to possess. On one occasion Didier gave a séance at which were present Lord

Normanby, Lord Fitzgerald, Didier's friend Marcillet, and several others. Didier was asked by Normanby to describe the latter's country residence in England. After some reflection the boy gave a description of the grounds, the house, and its furnishings. Normanby then showed Didier a box, and asked him to describe its contents. "It contains," said Didier, "a bracelet with a portrait. The likeness is one of Queen Victoria." Normanby took a book, and, when he had stated the number of a page, Didier immediately repeated a sentence in it, although Normanby did not let the book go out of his hands. Many other instances of Didier's alleged powers are related. It is scarcely necessary to say, by way of explanation, that the lad and his "friend Marcillet" were very clever tricksters. Such séances at the houses of ambassadors are always given by previous appointment, thus allowing ample time to gain the knowledge necessary to make a display of clairvoyant power. The trick with the book I have repeated many times. That with the box and the bracelet is familiar to every prestidigitateur. The account is reproduced here for the purpose of indicating to what length credulity may go; for the story of Didier has recently been republished in several newspapers, accompanied by serious editorial comment.

Of like character is the story told of Viélet, the servant of the Marquis de Puységur, who is said to have developed remarkable powers as a mind-reader. In 1784 the Marquis wrote:

"After I have magnetized Viélet I do not speak to him; I think before him, and he hears and answers me. If any one enters the room, he sees him if I wish it. He speaks to the stranger and tells him only what I wish him to say. If he is about to say more than he ought, I check (in my mind) his ideas, his phrases (often in the middle of a word), and I completely change the direction of his thoughts."

The Marquis de Puységur was a great romancer, and Viélet was a remarkably valuable servant. Out of some trivial circumstance—in which, most likely, the eye was the exponent of thought—the Marquis concocted a story that would have done credit to the famous Baron himself. It is not worth while seriously to discuss the probability or improbability of this tale. It is simply preposterous, and has no merit except its extreme

age. In the same eategory may be placed the tales of alleged thought-transmission that form part of the traditions of the middle ages; such as St. Augustine's account of a certain St. Albicerius, who professed to be able to read the thoughts of others, and such as the story told by Father Surin, who claimed similar powers for the "possessed" nuns of Loudun. It is well known upon what insufficient evidence and unreliable testimony the stories of the alleged miracles of those days are based.

But in extending our inquiries to occurrences of recent date, we come upon accounts of alleged mind-reading that are far more trustworthy and that merit investigation. Notable among these is the one given by the celebrated English "thought-reader," Mr. Stuart Cumberland, of some of his own feats, the most remarkable of which he describes in the following language:

"My first attempt at writing a sentence in a language of which I knew absolutely nothing, was made before the Khédive of Egypt. His Highness clapped his hands, and an attendant obeyed the summons. Paper and pencil were brought, and a sheet was gummed upon one of the gilded doors. The Khédive thereupon thought of a word, and, without any sort of hesitation, I wrote the word "Abbas" (the name of his son) in Arábic characters. I did not at the time know a single letter of the Arabic alphabet."

To the reader it will appear that this account of Mr. Cumberland's experience, which may be accepted as correct, establishes not only the possibility, but even the actual performance, of mind-reading. But such a conclusion is incorrect, for, as Mr. Cumberland himself admits, it was merely an example of muscle-reading. True, it was very skillfully done, but still it was only muscle-reading. I will ask the reader to accept this statement for the present, since the full explanation of the manner of accomplishing such results will appear in the course of this article.

Among the many accounts of so-called mind-reading, none seems more reliable than that related by Björnström as occurring in the experience of Beaunis and Liébault, of Nancy. The subject was a young man who is described as "a good somnambulist," upon whom Liébault had been accustomed to experiment by hypnotic suggestion. On the occasion mentioned, the young man was at Liébault's house, accompanied by a young lady—his cousin. The account says:

"Liébault, who hypnotized the young man, said to him: 'Upon awaking, you will perform the action of which those present are thinking.' Beaunis then wrote with a lead pencil upon a piece of paper: 'Embrace his cousin.' He showed the paper to Liébault and to the others, asking them to read the writing without moving their lips. When the subject came out from the hypnotic state they were to think intently only of that which he was to do, without telling him of it, and without aiding him by any sign. Shortly after coming from the somnambulistic state, the young man began to laugh, and hid his face in his hands. After much urging he was induced to own that the thing required of him was to embrace his cousin."\*

Here, also, is an instance that would seem to prove the possibility of thought-transference. But the conclusion is too hasty, for the phenomena may be explained on other grounds.

If there were any conditions under which thought-transference might occur, they would seem to be supplied by hypnotism. In the hypnotic state the mind of one person exerts over the mind of another an influence that surpasses anything with which we are acquainted under ordinary conditions. But the impossible cannot be accomplished, even by the aid of hypnotism. In this instance the subject of the experiment was very impressionable. He is described as being "a good somnambulist." No such subject, while in the hypnotic state, would have difficulty in divining what was required of him. It must be borne in mind that in the hypnotic state one's senses are intensely acute. That which ordinarily escapes the attention of the most careful observer is quickly detected by the sharpened senses of the hypnotist. It is impossible to make a motion that he does not see and interpret accurately. Thus, by virtue of his sharpened faculties, the hypnotist will sometimes divine, though he cannot "read," the thought of another. On this subject Bernheim says:

"It is well to add that many somnambulists possess extremely acute perception. The slightestindication guides them. Knowing that they are expected to carry out the hypnotizer's thought, they make an effort to divine it. If the experiments have been repeated many times with the same subject, the latter readily guesses that he should transfer such and such phenomena; and even when nothing is said before him, he can divine whether the transfer should occur or not, by the expectant attitude of the operator, or by some other indication." †

"In all degrees of hypnosis the subject hears and understands every-

<sup>\* &</sup>quot;Hypnotism," by Dr. Frederick Björnström, p. 72. † "Suggestive Therapeutics," by H. Bernheim, p. 95.

<sup>14</sup> 

thing, even though he may appear inert and passive. Sometimes the senses are particularly sharp in this state of special concentration, as if all the nervous activity were accumulated in the organ whose attention is solicited. These subjects think that it is their duty to try to carry into effect the operator's thought, and they therefore use all their sensorial hyperacuteness, all their concentrated attention, in trying to guess what is wanted." \*

Personal experience has taught me that this is true also of one who is under the influence of hasheesh—a state which very closely resembles that induced by hypnotism. While under the influence of this drug I have been able to detect that which would escape even the expectant attention of another. A slight motion, a quiver of the lip, a furtive glance, or a twitching of the finger, is as eloquent as a spoken word to the victim of hasheesh. He detects another's design as soon as it is conceived. As every student of Delsarte knows, one's mind cannot be occupied by an idea that is not reflected in the face or betrayed by some bodily motion. The hasheesh subject and the hypnotist are able to read these signs.

The incident related by Björnström is capable of ready explanation in the light of this knowledge. "The good somnambulist" divined what was expected of him. There sat his cousin—looking very conscious, no doubt—and there were Liébault, Beaunis, and "the others"; who or how many we are not informed. All were mentally directing him to embrace his cousin. Some of the party, in spite of effort at restraint, betrayed by furtive glances or by almost imperceptible smiles the nature of the task that had been assigned.

No account of alleged thought-transference ought to be accepted unless the experiment has been performed under test conditions. The test that ought to have been applied in this case was for the company to take in mind a thought that was foreign to the time and occasion, instead of one that would almost suggest itself to any acute observer. Had Liébault written, "Name the promoter of the Panama Canal," instead of "Embrace his cousin," failure would doubtless have resulted. Nor is the proposed test unreasonable. Words are the signs of ideas. If it is possible, by telepathy, to transfer from mind to mind one set of words, it ought to be as easy to transfer another \*Ibid., p. ix.

set. "Name" should be transferred as readily as "embrace"; "canal" as quickly as "cousin." On the other hand, if the idea itself, and not the sign of the idea, is conveyed, the case is not altered. One simple idea should be conveyed as readily as another. If this is not conceded, a crucial test may be applied; the subject may be blindfolded. Being thus deprived of the use of the special sense—vision—by which, in such cases as this, the knowledge is actually acquired, he will fail. If further evidence should be called for to prove that thought-transference under hypnotism exists only in imagination, it would be sufficient to state that neither Charcot nor Bernheim—than whom no one is more experienced or higher in authority—believes in its possibility, and that neither has ever seen an example of it.

Of modern mind-readers, the late Washington Irving Bishop was best known in this country. Mr. Bishop was at the same time an expert muscle-reader and a clever trickster. His most famous feat, the one from which he gained the greatest notoriety and most éclat, was that of driving a team of horses, while he was ostensibly blindfolded, at break-neck speed by a circuitous route through crowded streets, and finding, at a distant point, an object, or a name in a book, previously selected by a committee. For the amusement of my friends I have several times performed this seemingly impossible feat, and in no instance have my methods been detected. Its successful accomplishment depends upon two things: the fact that the one who is apparently blindfolded can see distinctly all the time, and the fact that the members of his committee are betrayed into becoming his unwitting accomplices. The trick is performed in this manner: The mindreader selects a number of persons—three, for instance—to act as his committee, or they may be selected for him by others. One member of the committee remains with the mind-reader; the other members, preferably in an open surrey, drive to a distant hotel, where they select a name in the register. They have been instructed to note also the day of the month on which the name was entered. They then return, driving by a circuitous route, but observing carefully every block passed and every corner turned. On their return to the room where the first member of the committee has carefully detained the mind-reader, they proceed to blindfold the latter; or rather he blindfolds himself, while permitting the committee to think that they take a leading part in the operation. He first produces a heavy hood, or bag, which he offers for the inspection of the committee. They scrutinize it, outside and in, pull it over their own heads, find themselves in utter darkness, and then return the hood, with no discoveries made. The mind-reader next places two balls of cotton, or folded kid gloves, against his eyes, and over these a folded handkerchief is bound about his head. He pulls the hood, the mouth of which comes to his shoulders, over all, and announces that he is ready for his task.

At this stage the mind-reader goes through a process that he calls "testing the committee." He informs them that a necessary condition of mind-reading is that all three members of the committee shall have exact knowledge of the route, the date, and the name. He gives plausible reasons why the communication should not be made by word of mouth, and instructs the two members of the committee who possess the knowledge to impart it to their fellow committeeman by making silent tracings with the finger against a blank wall. They obey; a committee always obeys a mind-reader. By means of this pantomime, the mind-reader gains, through his pervious hood, all the knowledge that he wishes, and the rest is easy. After some little by-play, he rushes with his committee to the surrey, takes the reins, drives at a furious rate over the selected route, enters the distant hotel, opens the register, finds the name, writes it on a slip of paper, and is greeted with ready applause.

The peculiar method of blindfolding must now be described. The handkerchief that is bound about the head exerts its greatest pressure upon the brows. By calling into action the muscles of the forehead, the handkerchief and the gloves are elevated, and vision is permitted beneath the lower margin. The hood is of peculiar construction, and is calculated to deceive the very elect. It is made of four thicknesses of black cloth, of which the second and third have apertures opposite the eyes. The outermost layer is always of some thin material. The innermost, which may be of heavy cheviot, has about the crown a circular seam, which comes in front of the eyes when the hood is on the

head. At one place the seam is so constructed that by proper manipulation, known only to the mind-reader, it will open to the extent of half an inch. Through this aperture vision is easy, for nothing remains between the eye and the light but the thin outermost layer. When the hood is removed from the head the temporary aperture is closed, and it cannot be detected even by the closest scrutiny and the deftest manipulation. The mind-reader's feat of opening a combination lock is accomplished in a similar manner. The committee, while being "tested" in the committee room, reveals the combination to the mind-reader by the usual pantomime.

The methods of mind-readers may thus be shown to be those of the conjurer and the mountebank. Muscle-reading, on the other hand, is a subject worthy of serious investigation. It is the perception, by one person, of an extremely slight, involuntary action of the muscles of another, with whom he is in contact. The contact is usually made by taking the hand or wrist of the subject, though there are various other methods. Connection is made sometimes even by means of a copper wire. The muscular action that is felt by the principal is so slight as to be almost imperceptible. In fact, in many cases it is so delicate that, while the principal's own muscles are affected by it, it is not made known to consciousness. In order to attain success, a muscle-reader must have a good subject, that is, a person whose muscles will give the necessary indications. Not every one fulfills this condition. My experience is that, among young people, about one person in five possesses the requisite qualities; among adults, but one in ten or twenty. The required condition is that the subject shall exert no muscular self-control, but shall permit his muscles to act spontaneously. In muscle-reading, vision is not necessary. In fact, it is often an advantage to have the eyes blinded, for this permits greater concentration of the attention upon the main object—the perception of the indications given by the muscles of the subject.

The feat most commonly performed by muscle-readers is the finding of a hidden object. Any small object, such as a penknife or a pin, is hidden from sight in an adjoining room, in another part of the house, or even in a distant locality. The mus-

cle-reader takes the hand of the subject, who must know the whereabouts of the hidden object. For a few moments he stands motionless; then he starts off in the right direction, and he seldom fails to find the object, even when it is hidden in an unusual place. "The dagger scene," as it is called, is but a modification of this. One person goes through the motions of stabbing another with a paper dagger, which is then hidden. The muscle-reader selects a subject, finds the dagger, and repeats the scene.

Another feat performed by muscle-readers is the reading of the number on a bank note, or of any arbitrary set of figures. This may be done in several ways. Usually the person who has the number in mind lightly clasps the hand of the muscle-reader, who asks him to think of the first figure of the series. The muscle-reader then slowly and audibly repeats the names of the nine digits, in order. At the instant when he speaks the name of the figure that the subject has in mind, he perceives a slight muscular tremor, or thrill, involuntarily made by the subject. This process is repeated with each figure until the entire number is obtained. A variation of this feat is performed with the letters of the alphabet, written on a blackboard or a chart. person selects any word he pleases, and then, at the musclereader's request, thinks of the letters that compose it, one at a time. The muscle-reader lightly clasps the subject's hand, and then slowly points from letter to letter on the board. When he points to the letter of which the subject is thinking, intelligence is transmitted to him by the usual muscular tremor. The subject then thinks of the next letter, and so on till the whole word is found out. By a like method one pin, selected from among a hundred others scattered over the surface of a table, can be pointed out.

One other feat remains to be described. A muscle-reader who is exceedingly expert can reproduce on a blackboard a letter, a geometrical figure, the rude outlines of an animal, or an arbitrary character. The muscle-reader may be blindfolded or not. The subject keeps well in mind the character, after tracing it on the board and then erasing it; but it is of course unknown to the muscle-reader. The latter, holding the crayon in his right hand and

lightly clasping the hand or wrist of the subject with his left, slowly traces and reproduces the character with some approach to accuracy. Of all muscle-reading feats this is the most marvelous. Mr. Stuart Cumberland and Mr. Bishop are the only muscle-readers, so far as I have been able to learn, who have ever accomplished it.

The testimony of all muscle-readers, especially during their first attempts, has been that they do not know what their methods are. Early success is a self-surprise. It creates the impression that one is possessed of a weird power. This was my own experience. But after repeated experiment and close observation, I am convinced that the facts admit of rational explanation. Primarily the results are all due to a single cause, but several different conditions enter into their execution. In making his way to the location of a hidden object, the subject usually does not lead the muscle-reader, but the muscle-reader leads the sub-That is to say, so long as the muscle-reader moves in the right direction, the subject gives no indication, but passively moves with him. The muscle-reader perceives nothing unusual. But, the subject's mind being intently fixed on a certain course, the instant that the muscle-reader deviates from that course there is a slight, involuntary tremor, or muscular thrill, on the part of the subject, due to the sudden interruption of his previous state of mental tension. The muscle-reader, almost unconsciously, takes note of the delicate signal, and alters his course to the proper one, again leading his willing subject. In a word, he follows the line of least resistance. In other cases the conditions are reversed; the subject unwittingly leads the principal. He becomes so much interested, and his mind is so intently fixed upon the object of the search, that he is oblivious of everything save the attempt to find it. Subjects have led me in this manner, and I have seen professional mind-readers enjoying a like benefit. Again, I have had subjects who would give patent assistance at intervals, and at other times leave me to my own resources. It must be said that this method of musclereading is exceptional; the usual one is that first described.

The discovery of a bank-note number requires a slightly different explanation. The conditions are these: The subject is

intently thinking of a certain figure. His mind is in a state of expectant attention. He is waiting for but one thing in the world to happen—for another to give audible expression to the name of that which he has in mind. The instant that the conditions are fulfilled, the mind of the subject is released from its state of tension, and the accompanying nervous action causes a slight muscular tremor, which is perceived by the acute senses of the muscle-reader. This explanation applies, also, to the pointing out of one pin among many, or of a letter or a figure on a chart. The conditions involved in the tracing of a figure on a blackboard or other surface are of a like order, although this is a severer test of a muscle-reader's powers. So long as the musclereader moves the crayon in the right direction, he is permitted to do so; but when he deviates from the proper course, the subject, whose hand or wrist he clasps, involuntarily indicates the fact by the usual slight muscular tremor. This, of course, is done involuntarily; but if he is fulfilling the conditions demanded of all subjects—absolute concentration of attention and absence of muscular control—he unconsciously obeys his impulse. A billiard player does the same when he follows the driven ball with his cue, as if by sheer force of will he could induce it to alter its The ivory is uninfluenced; the human ball obeys. This explains Mr. Cumberland's success in his experiment before the Khédive of Egypt. It will be noted that the account says that the paper was "gummed to the wall." This indicates that the writing was done in large characters, and was not of the ordinary size. Under the conditions, it is no more remarkable that Mr Cumberland should have traced the Arabic characters than that, in other instances, he should have traced letters, figures, or the outlines of beasts or birds.

Success in muscle-reading depends upon the powers of the principal and upon the susceptibility of the subject. The latter must be capable of mental concentration; he must exert no muscular self-control; he must obey his every impulse. Under these conditions the phenomena are in accordance with known laws of physiology. On the part of the principal, muscle-reading consists of an acute perception of the slight action of another's muscles. On the part of the subject, it involves a nervous impulse

accompanied by muscular action. The mind of the subject is in a state of tension, or expectancy. A sudden release from this state excites, momentarily, an increased activity in the cells of the cerebral cortex. Since the ideational centers, as is usually held, correspond to the motor centers, the nervous action causes a motor impulse to be transmitted to the muscles. Familiar examples of this are many. Any emotional disturbance of mental equilibrium has a like effect. The agitation of the impassioned orator, the wringing of the hands of the bereaved mother, the threatening gestures of the angry teamster, are instances of a like action, unrestrained.

The muscle-reader receives from his subject intelligence in regard to only two things—direction and time. In seeking a hidden object, he learns nothing of its nature, of its locality, or of whether it is one foot or one mile distant from his outstretched hand. In determining the shape of a figure or in finding a letter on a chart, he learns only the instant of time when certain conditions are fulfilled. If the conditions should not all be prearranged, the signal that he receives would be meaningless. The conditions amount to a tacit understanding between principal and subject that the one is to signal the other at the instant when he shall name or point to the letter or figure that is the object of inquiry. Involuntarily the subject carries out his agreement. The signal always means, "The expected has happened."

A statement of these facts is a sufficient answer to those who contend that, since there is nothing in a name, muscle-reading may, after all, be mind-reading. An intelligent comprehension of the subject will establish the fact that muscle-reading is just what the term implies. But mind-reading cannot be so favorably considered. It is a species of trickery in the performance of which the ordinary committee will, unwittingly, aid and abet the performer. Moreover, the mind-reader never permits himself to be subjected to test conditions, nor does every one know how to impose them. Mr. Bishop deceived the late Prof. William B. Carpenter\* by a simple trick with cards that a three-card-monte man would have detected in an instant. An expert should always be set to catch an expert. The average man is a poor observer.

<sup>\* &</sup>quot;Nature," vol. xxiv., p. 188.

In recounting occurrences involving the unusual or the marvelous, he is especially unreliable. He fails to take note of half that he sees, and he remembers things that never occurred. The part that he does not tell contains the key to the explanation.

The mind-reader succeeds by virtue of two conditions: 1, he always has the use of vision, when vision is necessary to the accomplishment of his object, even when he is supposed to be blindfolded; 2, he always requires his committeemen to part with whatever they have in mind, either by tracing or writing it, or by communicating it to others. In the transfer, which is always made in some peculiar manner, the mind-reader manages to possess himself of it, and he is then ready to "read" it. The one thing that no mind-reader has ever done, is to read a word kept in mind by another person. If treasures are laid up upon earth, thieves may break through and steal; but no man can be robbed of his unuttered thought.

CHARLES GATCHELL.

## TRADE-UNIONISM AND UTOPIA.

WHAT is generally called "the social question," and now more particularly "the labor question," is in one sense no new The various inequalities of men's lots in life, with which that question concerns itself, have always provided a subject for the moralist and the speculative philosopher. From the days of Plato downward, schemes have been suggesting themselves to some minds for lessening these inequalities or doing away with them. An attempt at realizing the Platonic polity was actually contemplated; while, without making too much of what is certainly ancient history—from the days of Wat Tyler, at all events —the ideas of social reformers have at intervals resulted in movements which, in one way or another, have aimed at solving practically the social or labor question. These schemes, these ideas, these theories, as allied with attempts at practice, have been growing in frequency for more than a hundred years. An increasing number of people have, during that period, been found to quarrel with existing social conditions, and seriously to believe that some fundamental change in them is producible.

Now this belief in each case has involved two things—some conception of an improved social state to be aimed at, and some conception of the means by which it might be brought about. And these conceptions, during the past hundred years, have shared with much else this common characteristic: they have not only varied, but they have also progressed; and in form, method, and intention, whatever may be their real value, they have tended to become more and more scientific. The earlier modern Utopias were vague and sentimental; they were sketches of an ideal structure, rather than architectural drawings of one. And the means by which they were to be realized were even vaguer; there was either to be some miraculous outburst of universal love, or an outburst, equally miraculous, of universal violence.

All the devils in man were either to be cast out or else to be called out; and in some unexplained way, by their absence or by their action, the world was to be turned, after a week or two, into a perfect kingdom of Heaven. Gradually, however, the reformers changed their method. Instead of merely observing the evils of the world, describing them, and declaiming at them, they began to seek for a scientific explanation of their origin. They began, in fact, to copy the frigid political economists. Thus it has come about that a school or party, whose earlier intellectual leaders were either mad dreamers or equally mad agitators, is at last presenting itself to us, on its theoretical side, as a serious and scientific school of economic thinkers, who, however bitterly opposed to the apologists of the existing order, are prepared to antagonize them on their own ground and to fight them with their own weapons.

When, however, we turn from the social reformers as theorists, and consider their ideas or counsels as men of action, we find that their progress has been far less rapid. In analyzing the evils they desire to remove, in proving that they are removable, and in advocating their removal, they have learned to talk and to think like other men of science; but their ideas as to how the result in question is to be accomplished have remained, till very lately, as unscientific as they ever were. Let any one compare the work of Karl Marx on "Capital" with the writings of the earlier Utopians, and he will realize how great, as an intellectual movement, has been the progress of the cause I speak of; but many, probably most, of the students of Karl Marx have had no clearer ideas than had the students of Cabet or of Rousseau, as to how the intellectual movement is to be made a practical one. They have had dreams of universal upheavals, of universal catastrophes, which somehow would do their business for them. They have thought to re-fashion society as Aaron maintained he had fashioned the idol for the Israelites. He cast gold and silver into the fire, "and there came out this calf." The reformers, till yesterday, thought they could do the same, though they had hardly decided whether the fire into which they would cast society should be that of hate or that of love. And hence the idea of any new solution of "the social question" has been till

quite recently, for all sensible people, either a laughing stock or a terror; a thing to be passed over or a thing to be stamped out; not a thing to be weighed dispassionately and to be dealt with on its merits.

But during the past few years, and especially during the past twelve months, the situation has changed in a very remarkable way. The growth of trade-unionism, and the international character which it has assumed, have been putting the practical side of social reform before us in an entirely new light, and have provided it suddenly, for the first time, with a policy which admits of discussion on the part of sensible people. And this policy does more than admit of discussion. Wonderful to relate, it demands discussion. Despite the failures which, in its more ambitious attempts, trade-unionism may have met with, the mere fact that such attempts have been made in the way they have been made, is enough to suggest that they may be more successful in the future. They all point to the possibility of one and the same thing—a federation of labor over the whole civilized world. This, at all events, as a practical end to aim at, is fast taking the place, among the aspirants after social change, of plots, risings, massacres, and explosions either of dynamite or of love; and whether the end will ever be realized or not, it will be at all events not idle to inquire what we may hope or fear as the result of it if it should be realized.

Let us suppose, then, the federation of labor to be carried to the utmost extent of which theoretically it is capable. Let us suppose all the working classes over the entire civilized world to be so grouped in unions, the unions to be so connected, the interests of all of them to be thought by themselves so identical, the organization and discipline of the whole to be so complete, and the influence of the whole over the various governments to be such, that all laborers form a single corporate body. How would labor, in that case, stand related to capital? How would the laborers stand related to the employers of labor? If the answer to this question is what our latest revolutionaries expect, unionism thus developed would accomplish all their dreams. By an irresistible, but bloodless, and perhaps gradual, process, capital would pass away from the hands of the capital-

ists, the employers of labor would no longer be employers, and all wealth would, in a measurable time, be redistributed. The way in which it is thought that this change would accomplish itself is obvious. If all laborers should be members of a universal union, undivided in counsel and completely organized in action, any employer who should offend that union would be instantly left without any laborers to employ. In other words, labor would be in a position to dictate terms to capital, instead of capital dictating terms to labor. Nor would the ease be mended if all the employers of the world, as well as the laborers, should be organized. Indeed, to understand the hypothetical situation fully, we must suppose such to be the case; and the ultimate factors in the social struggle would thus be a universal strike opposed to a universal lock-out. Now, although in a struggle which is partial, and which lasts but a short time, capital may, in power of endurance, have the advantage over labor, it may easily be argued that if the struggle should become universal, labor would tend to have the advantage over capital. For capital without labor is not only powerless and useless, but unless it is used by labor it rapidly wastes away; whereas labor, even by itself, would at least produce something, and might in time provide itself with new capital. In addition to this, we must remember that while the capitalists would be few, the laborers would be many; and physical force, though it might never be actually appealed to, would give its weight to labor, silently supporting it in the background. Making, then, the assumption, for argument's sake, that labor can ever universalize and perfect its organization, the time must arrive when, at all events for the moment, capital and the possessors of capital will be altogether at its mercy. The capitalists will have before them only two courses—either to allow their capital to be used under such conditions and on such terms as the laborer may dictate, or not to allow it to be used at all. In this last case, it would benefit neither themselves nor others; and even though it might be handed over to nobody else, they themselves would be practically dispossessed of it. A man, for all practical purposes, is as completely expropriated if he is not allowed to use his money, as he is if his money is actually taken away from him. On the other hand, if the capital of

the world should be employed on terms dictated by labor, it is certain that such wages would be exacted as would leave to the capitalists no profit or interest. In this case, therefore, just as much as in the other, they would virtually be expropriated; their whole wealth would be withdrawn from them. And this, indeed, is the precise situation which English ship-owners have seen actually menacing them. If they should employ their capital on the terms demanded by their men, no profits would be left them; and they themselves, as they have distinctly told the public, would be no worse off if they should suspend their business altogether. Now, in an isolated case like this, such a suspension might be possible. A single body of employers might, in the last resort, be able for a time to keep their capital idle; but it is practically certain that the same thing could not be done with the whole capital of the world, in opposition to the whole of the laborers. The capital would continue to be employed, but it would be employed on the laborers' terms. The capitalists might not technically be robbed of their property, but they would have no share in its control or in its revenue; and though nominally they would have lost nothing, in reality they would have lost everything. And this brings us to two all-important questions: Could such a situation be brought about? And if it could be brought about, could it last? Or, in other words, would labor be able to keep what, in this case, for the moment, it would inevitably win? To both these questions the answer will be, No; for reasons some of which may be said to lie on the surface, while others have a tendency to be always sinking beneath it.

To begin, then, we must admit that the recent developments of trade-unionism have been surprising in the last degree, and vividly suggest the kind of result we have been considering, though they do not promise or portend it. They force on the imagination a picture of that result, but they do not offer to the judgment any indications that it is possible to realize it. On the contrary, if we consider them dispassionately, they do the precise opposite. In the first place, the following facts must become apparent to us. The wider the attempted scope of the union or federation that we speak of, the more difficult will become the task of

uniting the various sections to be comprised in it, and the greater will be the antagonism of interests between these sections. Until all the climates and soils of the world shall offer equal advantages to the laborer, there never can be a community of interest between the laborers of all countries; and as the laborers become owners of the soils that they occupy, the diversity of interests will be more and more apparent. It has often afforded matter for useless wonder to philosophers, that the various peoples should consent to supply soldiers to fight and die for the ambition and aggrandizement of their rulers. It is a fact, however, that the various peoples have done this; and if they have fought and died for the advantage of others, we can hardly doubt that they would do the same for the advantage of themselves. The laborers of different countries, in fact, are natural allies only so long as they are in the presence of what they think to be a common foe-capital; and if once that foe should be removed or crippled, they would find bitterer foes in one another than they ever found in it.

These difficulties, however, I only mention in passing. I not only do not purpose to dwell on them, but for argument's sake I will suppose that they do not exist, and will proceed to others, which, though less apparent, are far deeper and far better worth discussing. Let us suppose, then, that the first great step has been accomplished, and that, despite the difficulty of organizing vast masses and of harmonizing discordant interests, all the laborers of the world are united in one corporate body and are actually, in the way already described, confronting the capitalists and the employers. Now, would the fact that the laborers had advanced thus far afford any proof that they would be able to advance so much farther as to make any permanent use of the partial advantage they had gained? It would certainly, at first sight, seem that the answer to this question must be, Yes. "Here," it would be argued, "is labor led by its own leaders.
With no instruction, with no dictation from above, it has shown itself capable of organizing and directing itself. What doubt can there be that the leaders who have brought it thus far will be competent to bring it one step farther, and teach it how to appropriate the fruit that is already in its hands? If labor can

organize itself in this marvelous way to resist capital, who can doubt that it can organize itself to employ capital?" There we have in a few words the argument which presents itself to our latest prophets of labor, and which they present, with not unnatural triumph, to alarmed or sanguine hearers. It is an argument, however, vitiated by a fallacy which seems commonly to escape not only those who use it, but those who would give anything to refute it. What we are asked to consider is how certain men have succeeded in organizing labor, and what a formidable thing they have made of it. But in reality what these leaders have done has been something quite different. They have organized laboring men, but they have not organized labor. On the contrary, they have organized idleness—abstention from labor. It is impossible to over-estimate the importance of this distinction. The whole ostensible object of the leaders of the labor movement is to secure for labor the wealth which, according to these leaders, labor produces. But the amount of wealth which labor produces, or, in other words, the amount of the prize for the possession of which labor is contending, depends on the skill with which the labor of the laborers is organized, not on the skill with which the idleness of the laborers is organized. Their organized idleness is no doubt a valuable weapon, but it is valuable for militant purposes only, not for productive purposes. It may assist them to seize on the instruments of production, but it does not tend to give them any skill in using these, any more than the ability to rob a man of a fiddle tends of itself to turn a burglar into a musician. Thus the ability of the laborers to organize a universal strike might show that they are able to take all the wealth of the employers from them, but it would not indicate any ability whatever to transfer any fraction of this wealth to themselves. Thus far the productivity of labor has depended on the skill of the employers in commanding it and directing it. If the employers are to be ousted, and if labor is to maintain its present productivity and not to sink into a hopeless and helpless chaos, men with similar powers of command and similar skill must be found to take their place; and the question is, Would such men be forthcoming?

Let us consider exactly what this question involves. It is

not a question of whether or not the laborers have, among their millions, men of sufficient natural capacity. No doubt they have; and if all the present employers of labor should die childless during the course of the next few years, we may be certain enough that, under the present condition of things, laborers would be found who would gradually take their places and supply us with a new generation of employers, capitalists, and millionaires. The question is not whether such men would be forthcoming under present conditions, but whether they could be induced to come forward under entirely changed conditions. Hitherto the only inducements worth taking account of, that have ever incited men to direct and to organize labor for productive purposes, have been the hope and the possibility of securing for themselves whatever special product their ability has been instrumental in producing. But the essential idea of all the leaders of the labor movement has been to take away these inducements, or to make them as small as possible. It is obvious, therefore, that the ultimate success of this movement must depend on whether society could, under such conditions, still secure the kind of ability spoken of.

Now, one of the most important morals that have been drawn from the growing successes of unionism, has been that this kind of ability could be so secured. We are urged to look at the characters and careers of the men by whom labor is now being organized. It is pointed out to us that the motives which actuate these men are not personal gain and the accumulation of capital. They give to the common cause exceptional ability, and yet they neither claim nor expect any exceptional reward. The ability required to organize a great strike is not less than the ability required to organize a great industry; and if facts prove that, without any interested expectations, men can be got to do the one, what doubt, it is asked, can there be that we shall get men, on the same condition, to do the other? The fallacy of this argument is what I am here endeavoring to emphasize. On the surface it is eminently plausible; but the more it is examined, the more clearly we shall see not only that it does not prove what it is supposed to prove, but that its entire tendency is to prove the exact opposite.

In the first place, to repeat what I have said already, the leaders of the labor movement have not, in that capacity, been leaders of labor. That, however, is by no means the whole of the case. A more important feature of it is that no man who has been successful as a leader of labor has ever been found among the leaders of the labor movement. To put the matter in a plainer and more brutal way, no man who has been successful in increasing production has ever been found among those who are working to redistribute the product; and conversely, not one of the men who are working to redistribute the product has ever shown himself capable of assisting in increasing production. To this broad rule there may perhaps be some isolated exceptions, but as a broad rule it is indubitably true. Outside of a circle of foolish and half-sincere sentimentalists, where do we find any of the opponents of capital among men who have inherited it? Or—and this is a yet more pertinent question—where do we find any of the opponents of capital among men who have the ability to make it? And by the ability to make it we mean a very simple thing—we mean the ability to direct labor to advantage. The leaders of the labor movement have, as a class, been men absolutely without that quality; and without wishing to call in question the sincerity of their philanthropy, the fact remains that their desire to divide the wealth of the world among their fellows has had for its basis an utter incapacity to add anything to that wealth themselves.

And now let us deal with the fact, which I have no wish to question, that these men have been so far disinterested that they have, in spite of their exceptional efforts, not aimed at securing any exceptional pecuniary reward. That may be perfectly true; but though there may have been no pecuniary reward to stimulate them, there have been rewards of a kind equally selfish. There has been in many cases the satisfaction of a grudge, owed to society because they have not been able to succeed in it; and, above all, there has been the intoxication of power and notoriety suddenly placed within the reach of men who would otherwise live and fret in uneventful, helpless obscurity. There is no greater mistake than to imagine that men whose sole road to success lies in attacking wealth, are for that reason less disinterested,

less greedy of personal distinction, than the men whose road to success lies in acquiring or creating wealth. Indeed, a study of human nature in general, and of modern industrial history in particular, proves that in a society where there are no special rewards, there will be no exercise of any special ability. It proves, further, that between the ability and the reward there is always some connection in kind, and that, while anger or ambition or enthusiasm may lead a man to secure many things for his fellowmen, one reward only will lead him to produce wealth for them, and that is the possession of a large proportion of the wealth produced. The recent progress of industrial events, therefore, has no tendency to throw any doubt on the belief that the possession of private property, the enjoyment of interest, and the dictatorship—however limited—exercised over labor by the men to whom the profits will go, or by their representatives, form essential conditions not only of the production of wealth, but of the prosperity of labor itself.

We must not, however, blind ourselves to the other side. History is teaching us that laborers may be organized in two ways: first, as a producing body; secondly, as a resisting or self-protecting body. In the latter capacity they may be able to govern themselves, but in the first they must be always governed by others. The conclusion is that in the very nature of things it is impossible for either party to gain a complete victory. It is obvious that the capitalist cannot exist without the laborer. A deeper and more dispassionate study of human nature will in time convince even our most ardent social reformers that the laborer will never progress except with the progress of the capitalist. The names of things and the forms of things may change; but the essential facts of the case, being facts of human nature, will always remain the same, till human nature is metamorphosed.

W. H. MALLOCK.

### RAILWAY PASSENGER RATES.

THE average amount received by railroads in the United States for carrying a passenger one mile, is two and one sixth In England it is a little less; probably about two cents. In France it is not quite a cent and a half; in Belgium and in Germany about a cent and a quarter. In Austria, before the recent changes in the tariff, it was a little more than a cent and a half; at present it is probably only about a cent. In British India it is less than six tenths of a cent. These are the actual amounts received. The results have been obtained, wherever possible, by dividing the total passenger earnings by the number of miles traveled by passengers. In England, where statistics of passenger mileage are not given, we are compelled to rely on estimates. The nominal rates of fare are almost always higher than the average of actual receipts, owing to excursion and commutation business. The difference between actual and nominal rates is usually from 10 to 20 per cent. Why are passenger rates so much lower in continental Europe than in England or in America? Can we hope for a change in this respect, and for a reduction in the cost of passenger travel to the standard of France and Germany? What conditions must be fulfilled to make such a reduction possible? These are questions which are being asked everywhere, especially since the recent reductions in Austria and Hungary have attracted more wide-spread attention to the subject. Let us try to answer them in order.

The first obvious reason for the difference in fares is a difference in the kind of service rendered. Continental Europe pays two thirds as much as America or England and gets an inferior article. India pays still less and gets still less. The difference is seen both in quality and in quantity of service. In India express trains rarely run at a greater speed than 25 miles an hour. In Germany and France their speed ranges from 25 to 35 miles

an hour, and only in exceptional instances is more than 40 miles an hour. In the United States and in England the maximum speed rises as high as 50 or, in exceptional instances, 60 miles an hour. With regard to the comfort of the cars in different countries, there is more room for difference of opinion; but there can be no doubt that the average traveler in the United States, or even in the English third-class car, fares better than he would in the corresponding class on continental railroads, and infinitely better than the bulk of travelers in British India. No rates, however low, would induce an American to be content with Austrian third-class accommodation, or to tolerate that which is furnished to the average Hindoo traveler.

There is a second reason, of even greater importance, though it is less obvious at first sight. This is the difference in the number of trains. Taking into account density of population and amount of travel, Europe has more trains than India, and America or England more than continental Europe. If there are 500 travelers daily who wish to use a certain line in India, the authorities give them but one or two trains a day. They are thus able to secure very large train loads; and as the train, rather than the passenger, is the unit for many items of expense, the sacrifice of public convenience in the matter of hours of travel is a source of economy for the railroad. For a given number of people who can use railroads, Austria provides more trains than India, Germany more than Austria, England more than Germany, and the United States more than England. Each concession to the public convenience in this matter involves a loss which must be paid for somewhere.

Our railroad men are fully awake to the economy of large train loads. They would be ready to make great reductions in charge if large loads could thereby be secured. In freight business they have carried this policy out to the fullest extent. A ton of freight can be forwarded at almost any time of day or of night with comparatively little inconvenience to the shipper. The railroads can thus make train loads to suit themselves; and it is a significant fact that American freight-train loads are larger than those of Europe, while American freight rates are decidedly lower. Where the railroad men have had power

to handle increased loads with fewer trains, they have done so, and the public has had the benefit of the reduction to a striking degree. They have not been able to do the same thing in passenger business, because the public would not allow it. The differences in passenger rates in different countries are not due to arbitrary action on the part of railroad managers, but to differences in public demand. Continental Europe demands cheapness, and is willing to undergo the sacrifices attendant upon it. England and America demand good trains at convenient times, and are willing to make the necessary pecuniary sacrifice rather than go without them. Not only does each country pay for what it gets, but it gets what it wants to pay for—a fact often overlooked by those writers who seek to apply the standards of continental Europe to England and America.

That passenger fares are cheapest in the countries which have the lowest wages, is no mere accident. Wages are the prime cause of difference in the whole matter. If a man makes only five cents an hour, he can afford to wait an hour to save five cents. If he makes ten cents an hour, he cannot do so. If he makes fifty cents an hour, he is very far from being able to do To the man who earns high wages, economy of time is more valuable than a slight difference in railroad fares. He can afford to pay five or ten cents more for the sake of having trains run when he wishes. For long distances, he can afford to pay fifty cents or a dollar more for the sake of having them run fast. The Hungarian would prefer, for the sake of saving a dollar on the fare between New York and Philadelphia, to wait half a day for his train and then to take four or five hours for the journey. The American would rather pay a dollar more to have a train run when he needs it and to have it go as fast as possible. In proportion to density of population, we run many trains where European roads run few. Where we run few trains, Europe builds no roads at all. We demand facilities for quick movement wherever we can have them. An increase of facilities is worth more to us than a reduction in charge.

How much more work is demanded of American railroads than of European ones, will be seen by the following table:

Countries.	Population.	Miles Run by Trains An- nually.	Annual Train Service per Head of Population.
United States (1889),	. 61,000,000	724,000,000	12
Great Britain (1889),	. 38,000,000	303,000,000	8
Germany (1889),	48,000,000	181,000,000	38
France (1888),	. 38,000,000	145,000,000	384
Austria-Hungary (1887),	40,000,000	66,000,000	12/8
India (1889),	.200,000,000	51,000,000	01

These figures are for passenger trains and freight trains together, as some countries do not give statistics of the two separately; but the general result would be nearly the same if passenger trains alone could be considered. The figures show that for every man, woman, and child, a train is run 12 miles annually in the United States, in Great Britain eight miles, in Germany or France a little less than four miles, in Austria not much more than a mile and a half, and in British India less than a quarter of a mile.

But why cannot our railroad men, with our present train service, secure larger loads by making lower rates, and give us cheap service as well as plenty of it? Why cannot we secure two good things instead of one? For two reasons: 1, because it is not certain that low rates would be followed by greatly-increased travel; 2, because such increased travel would not be so economical to handle in America as it is in Europe. It is wrong to assume that, because reductions of charge in Europe have increased travel enormously, they would have a proportionate effect in America, and a corresponding advantage in American railroad economy. It is a somewhat significant fact that second-class trains at reduced rates have been extremely successful in Europe and not at all so in America. Other things being equal, the American public would be glad to have its travel at lower fares; but it cares more for comfort and speed, and for being able to travel at its own times, than for a slight difference in charge. The assumption so frequently made, that a reduction in fares would cause an enormous increase in travel in this country, is for the most part a pure assumption, not borne out by the facts. In a country with dense population and low wages, whose railroad facilities are little used, a reduction in rates may produce

much gain and little loss. This has been precisely the state of things in Hungary; it is not at all the state of things in America. The railroads of Hungary before the recent reform carried about 5,000,000 passengers a year, in a population of 15,000,000. After the reform was put into operation the number of passengers more than doubled. But even after this change the Hungarian system was far below the American standard of usefulness. During the first year after the change all the railroads in the kingdom of Hungary together carried about as many passengers as the Long Island Railroad alone. Massachusetts has only about one fourth the population of Hungary, yet the railroads of Massachusetts carry seven times as many passengers as those To do this, they furnish an enormously larger number of trains, and at some points their tracks and stations are already so crowded that an increased use would not be accompanied by increased economy to the road, even at the same rates of fare. Not only are the Hungarian demands as to speed and quality of service less exacting than those of Massachusetts, but the Hungarian problems of operation are much simpler.

To these facts, rather than to "the zone system," must be ascribed the difference between American and Hungarian charges. The zone system in itself amounts to very little. It simply substitutes a longer unit of charge for a shorter one. It means charging ten cents for every ten miles or fraction thereof, instead of one cent for every mile or fraction thereof. It enables the ticket agent to keep fewer kinds of tickets in stock, and thus gives a slight advantage in railroad economy. Whether that advantage is sufficient to make up for the arbitrary inequality of treatment between different zones, whereby points just within the limit are favored and those just without the limit are discriminated against, each railroad or each community must settle for itself. The importance of the zone system in Austria and in Hungary lies in the fact that its adoption was accompanied by a great reduction in rates. The unit rate for slow third-class trains, which had previously been nearly a cent and a half a mile, was reduced to less than one cent. Travel increased rapidly under the influence of this change, without the necessity of a corresponding increase in the number of trains or in their speed. The trains, for the most part, are very slow. No baggage is carried free. All must be laboriously weighed, making it necessary for the traveler to be at the station a long time before the departure of a train. The use of railroads under the new system, though vastly greater than it was before, is vastly less than that of a well-managed American road at American rates.

Our American railroads already give commuters the benefit of fares not far different from those of Hungarian railroads. To demand that they should make these rates general because Hungary or Austria has done so, would be to ignore differences in service and in conditions of traffic. If any one will go to a station in one of our large cities at a busy time of day and ask whether double the traffic could be handled without great increase of expense, he will at once see the absurdity of the question. The facilities are already crowded to overflowing. There is reason for demanding reform in methods of handling passengers, but such reform in operation is a necessary condition for any considerable reduction in passenger charge. In these respects we have little or nothing to learn from the Hungarians. been able to make the changes which they have made, not because they are in advance of us in methods of operation, but because they are immeasurably behind us in the demands which their people make upon railroads and in the services which those railroads render, or are required to render.

ARTHUR T. HADLEY.

### THE FLOOD PLAINS OF RIVERS.

FIRE, flood, famine, war, and pestilence were long reckoned foremost among the evils to which mankind is subject. With the growth of knowledge concerning the relations of man to his environment, and with the development of far-sighted altruism, men have united in devising and applying means for suppressing, or at least for opposing, four members of this maleficent family. Fire is provided against by numerous devices adapted to all modes of life and to all stages of culture; by legislative enactments and municipal ordinances in civilized nations, and by special organizations of men and appropriations of money throughout the more advanced countries. flies before the community of interests and the ready interchange of products that measure the advance of nations in material and moral development. War in most countries is opposed by two of the most potent determinants of conduct, namely, private principle and public policy; and of late a powerful movement toward the abolition of war among civilized nations has been gaining strength. Pestilence is weakened by combinations among men for mutual aid, is crippled by the decadence of personal and national strife, and is disarmed by the cleanliness of modern times. Even now biology and medicine are uniting to invade the last stronghold of this evil agency. They are isolating her protean germs, laying bare her insidious processes, turning her own weapons against her by opposing bacterium to bacterium and ptomaine to microbe, and, if the signs of the times are not misleading, are surely encompassing her final downfall. famine, war, and pestilence have been successfully met by human ingenuity, foresight, benevolence, and sagacity; but the flood remains, a barely-mitigated evil, a hardly-appreciated obstacle to progress. Indeed, as population has increased, men have not only failed to devise means for suppressing or for escaping this evil, but have, with singular short-sightedness, rushed into its chosen paths.

A fertile bottom land was the goal of the American pioneer as he bent his tedious way from the Atlantic seaboard across the mountains and into the broad basin beyond. Moreover, his course was constrained by hills and forests to the valleys of rivers and streams. So it happened that the early homesteads and settlements were located on the flat and fertile plains flanking the waterways, and that the early routes of travel traversed the same plains. Thus, in one stage of the settlement of the Mississippi valley, the population was confined mainly to the narrow belts of alluvial land skirting the streams.

As time passed, isolated homesteads grew into settlements, and settlements into towns; and as the towns waxed in population, wealth, and trade, some of them became cities. Meantime the bridle paths and wagon trails of the earlier period were transformed into stage routes and turnpikes, and at the same time navigation was established on the larger streams. Yet in this stage, as in the earlier one, the centers of population and the lines of travel and traffic were confined to the waterways, and only a small proportion of the nomadic and agricultural population pushed into the forest fastnesses of the uplands. During this stage such cities as Wheeling, Cincinnati, and Louisville came into being on the Ohio; and as the border land between white settlements and Indian hunting grounds slowly advanced, such cities as St. Louis, Keokuk, Dubuque, and La Crosse on the upper Mississippi, La Salle and Peoria on the Illinois, Terre Haute and Vincennes on the Wabash, St. Charles, St. Joseph, and Omaha on the Missouri, and a score of lesser towns on a dozen other rivers, were planted. But during this era of overland staging and river navigation, as during the earlier era of pioneer travel, settlement followed the waterways, population gathered on the river-side plains, and the uplands were sparsely inhabited or quite unsettled; so that, despite the greater area of upland, the larger part of the population was concentrated on the lowlands.

A third stage in the settlement of the Mississippi valley was characterized by steam locomotion. During this stage the railways were first extended along the smoothest lines and through the largest towns, thus adding to the population and wealth already accumulated on the alluvial lowlands; and steam navigation co-operated with the steam railway in accomplishing this end. But later the railways were pushed out over the uplands, carrying trails of settlement in their divergent courses; and at the same time the influence of river navigation waned. This stage was that of the dispersion of population, and has reached to the present time; yet to-day, as during the earlier stages in the occupation of the Mississippi valley, population continues to follow the rivers, and cities, towns, and homesteads are found on the alluvial lowlands by which the rivers are flanked.

It would be interesting to determine the relative density of

population upon the riparian lowlands and upon the intervening uplands, not only within the Mississippi valley, but throughout the eastern United States; but the data are inadequate. Only limited areas are mapped with such accuracy as to distinguish between lowlands and uplands, and even in these the cities stretch from lowland to upland, the towns often stand on slopes, and the civil divisions by which the rural population is enumerated are independent of physical boundaries; so that without a special census the common population cannot be divided. A rough evaluation of the relative areas of alluvial lowland and intervening upland in the eastern half of the United States, and a still rougher estimate of the riparian and non-riparian population, may, however, be made. Detailed maps of typical tracts indicate that from five per cent. to 15 or 20 per cent., or an average of about 10 per cent., of the given area may be classed as alluvial land. Probably this ratio may safely be extended to the 1,500,000 square miles of the eastern United States, exclusive of the delta plain of the Mississippi. This single alluvial tract is 1,100 miles long, measured on the river, or one half as long, measured in a direct line; more than 100 miles in average width; and fully 60,000 square miles in extent. The total area of alluvial lowlands in the eastern half of the country would thus appear to be not less than 210,000 square miles, or 14 per cent.

The concentration of population upon alluvial lowlands, commencing in the interior with the advent of the pioneer, is still notable, and is displayed in New England, along the Atlan-

tic seaboard, in the Gulf States, and on the great lakes, as well as in the Mississippi valley. Eighteen of the 21 principal cities and towns recorded by the eleventh census\* in Illinois are located upon rivers, and their business blocks are built upon alluvial lowlands. Fifteen of the 18 recorded cities and towns in Indiana were founded upon alluvial lands, though several have since extended partly upon adjacent uplands. The nucleus of every city and town recorded in Iowa was fixed upon a riparian plain, and more than half the urban population of the State is to-day confined to such plains. In Missouri all the leading cities are partly or wholly riparian. In Ohio only half a dozen of the more prominent centers of population stand upon uplands, though the larger cities, originating on the alluvial lands, have commonly encroached upon the adjacent hills. Two thirds of the cities and towns of Pennsylvania are built largely upon the lowlands by the river sides. The eastern cities marking the "fall line" from New York to Richmond are essentially riparian, despite the dearth of alluvial deposits along this line of recent earth movement. Indeed, if the 355 cities recorded by the eleventh census in the States between New England and the onehundredth meridian are grouped according to their situation with respect to waterways, 204, with an aggregate population of 5,593,340, are found to be riparian. There are 59 seaboard and lakeside cities, with an aggregate population of 6,880,043; 44 inland cities, with a population of 840,466; and 28 unclassified cities, aggregating 675,676 in population. Excluding the seaboard and unclassified cities, there remain 248 centers with an aggregate population of 6,033,806, of which 89 per cent. is riparian; or, including the various classes, there is a total urban population of 13,989,529, of which 40 per cent. is riparian. The concentration of population on the alluvial lands is even more notable among towns and villages than in the larger cities, which have commonly outgrown the valleys and spread over the adjacent uplands. The smooth plains are favorite sites for homesteads and hamlets, for villages and county towns; the most practicable railway routes traverse them; river navigation and industries

<sup>\*</sup>Unpublished record, furnished through the courtesy of Mr. Henry Gannett, geographer of the census.

that depend on water power attract capital and labor toward them; the most fertile soils are found upon them; and so the banks of the waterways bristle with lesser as well as with greater aggregations of population. Summarizing the values published by the census bureau and the well-known facts of like import with respect to smaller towns and individual residences, it seems safe to estimate that fully 25 or 30 per cent. of the population of the eastern United States is crowded upon the 14 per cent. of alluvial lowland. If this estimate is just, then the density of lowland population is about twice as great as that of upland population. In view of certain conditions to which alluvial lands are subject, it would be surprising even to find the population uniformly distributed over lowlands and uplands; it is doubly surprising to find men massed on the lowlands.

The river makes its own bed. Common observation shows that streams of high declivity and rapid flow attack their banks and bottoms, now here, now there, and thus progressively corrade their channels; that streams of low declivity and sluggish flow deposit sand and mud along their banks or on their bottoms, now here, now there, and thus progressively fill their channels with silt; and that streams of medium declivity and moderate flow sometimes corrade their sides and bottoms, and again deposit comminuted matter thereon, thus modifying their channels through a combination of processes. Moreover, it is a matter of common observation that such changes in channels are most rapidly effected during high-water stages, so that the aspect of a trout brook or a mill stream, with its banks of gravel, its glistening cascades and darkening pools, its grassy banks and flower-fringed meadows, may be completely changed by a single freshet.

These common observations have been extended and systemized by students of the earth and its features; and it has become a fundamental tenet in geologic doctrine that not only the channel, but the valley in which it lies, is fashioned by the stream. There was a time, indeed, when pioneer geologists, misled by the magnitude of the work and the minitude of the agent, ascribed the origin of valleys to rock-fissuring produced by profound earth movement; but since the days of Lyell the competence of streams to excavate the broadest valleys and the deepest

canyons has been recognized. The chasm in which the Hudson breaks through the highlands—albeit possibly located by a line of earth fracture—was excavated by the same river that now sluggishly washes the lofty cliffs; the gorge of the Mississippi from St. Paul to Dubuque is the product of corrasion unaided by rock-fracture; the Grand Canyon of the Colorado, foremost among the wonders of a wonderful mountain land, was carved by the sand-reddened river despite the obstructions thrown in its course by earth movement. This appalling chasm is commonly regarded as the most impressive illustration of the efficiency of rivers in trenching the rocky earth crust, yet attentive reading of the geologic record shows that even lesser rivers have wrought even greater results. Thus, during a longpast age the Susquehanna and the Potomac not only carved canyons twice as deep, though perhaps never so steep of wall, as that of the Colorado, but continued their work until the cliffs, spurs, ridges, plateaus, divides, and indeed nearly all of the vast rock mass rising above river level, were borne bit by bit into the Atlantic to build a new land, part of which lies between the "fall line" and the coast. The mountain peaks are shaped by the storm, the mountain gorges are carved by storm waters; the rugged hills and crags are rugged, not because of earth movements, but because of the activity of running water stimulated by steepness of slope; and the broader valleys are more slowly fashioned by the streams winding through their bottoms.

There is an important result of river work whose origin

There is an important result of river work whose origin may be recognized through observation or deduced from geologic principles with equal facility; namely, the alluvial plain by which the channel is commonly flanked. The overflowing Nile spreads a veneer of sediment over its delta, and the Egyptian fields are annually fertilized thereby. Before the advent of man the floods of the Mississippi in like manner distributed sediment over the broad delta plain stretching from the mouth of the Ohio to the Gulf; and there are to-day intelligent planters in the levee-protected parishes of Louisiana who hold that the interests of the delta country would be best promoted by allowing the great river and its distributaries to discharge their waters and to spread their sediments freely over the adjacent lowlands.

Lesser rivers in like manner overflow their riparian plains during freshets, dropping sand and silt in depressions and on gentle slopes; and during the great flood which comes once in a decade or once in a century, the entire plain is flooded from bluff to bluff, and the receding waters leave great sheets of river mud, together with some fresh-cut channels and more banks and bars of silt. It is true that streams of exceptionally great declivity, such as mountain torrents, corrade their channels so rapidly that each freshet falls short of the last; but these are commonly without alluvial plains, and so form a class by themselves. It is patent to every observant resident on rivers and smaller streams conditioned in the usual way, that the freshet waters encroach upon the alluvial plains, now here, now there, sometimes over their entire extent, and that, while part of the material is carried far away, part is transported only a few rods, and some that has been brought from a distance is deposited. It is evident, too, to the resident who continues his observations for a decade or a generation, that the degradation, shifting, and deposition of material is commonly such as to preserve the general form of the plain, and to maintain its general relation to the low-water channel on the one hand and to the bounding bluffs on the other.

The flood sediments of the Nile and the Mississippi, and the analogous deposits of other rivers, are sands, silts, muds, perhaps gravels, assorted and distributed by currents and eddies in a manner depending upon the configuration of the overflowed plains. Commonly these materials are identical in character with those of which the entire plain is built, and analogous to them in assortment and distribution. The fisherman by the river side and the husbandman in the riparian field, as well as the systematic student, recognize the substantial identity of the older and newer alluvial deposits, and ascribe both to the agency of the river. The fellah on the Nile, the planter on the lower Mississippi, and the trucker on the mill stream perceive that the annual deposits assume the form of sheets of stratified sediment, here coarse, there fine, now thick, now thin, sometimes interrupted, and that successive sheets may be separated by layers of vegetal matter. He commonly perceives, too, that these structural conditions of the surface are repeated in all directions in the mass of material that constitutes the alluvial plain.

All observant dwellers on alluvial lands are aware that the immediate river banks are higher than the more remote portions of the plain. During freshets the water is charged with detritus, and in the swift current of the main channel this detritus, being kept afloat by the whirls and eddies of the raging waters, is transported freely; but as the flood rises, and as the waters escape from the channel over the plain, the current is checked by the shoaling of the water and by the brakes of the bottoms, and so the contained detritus is in part deposited. Now this deposition takes place most rapidly over the lands in the immediate vicinity of the main channel, and in consequence the immediate banks, being most rapidly built up, soon come to be the highest lands in the entire plain. The land may even incline from the river banks to the bases of the distant bluffs. Thus are built low, broad, natural levees like those of the intricate network of tributaries and distributaries in the Mississippi delta; and thus the stream channels are rendered so unstable that, as time passes, they shift from side to side of the alluvial zone.

The secular shifting of great river channels is recorded in the conformation of the plains. The abandoned channels of the upper Mississippi, for example, are plainly marked by "sloughs," or minor channels, through which part of the current passes; by meandering moats clogged with alluvial sands at one end or at both ends; by crescentic lakes completely dissevered from the main and minor channels; and by irregular depressions and morasses scattered here and there over the plain. That these are the tracks left by the wandering river, is shown by the observations of the river pilot as well as by the inferences of the geologist. When the channel is first diverted, during some great flood, a part of the water flows for a time through the old channel; but the new was selected because it offered a lower level or a shorter course, and it therefore gains on the old until the greater volume of water flows through it. The new passage is rapidly widened by the swift current, while in the old the current lags and the indolent waters drop their sand and silt; so the old channel becomes a slough. Then, during some freshet, the shifting currents build a bar across an extremity of the old channel, and it is finally abandoned save during the highest floods. As time goes on, the other extremity is dammed, and the slough becomes a moat. Next, the ever-wandering river shifts far upon its plain, and may leave the moat miles away from its main channel, to be gradually transformed into a lake of clear water, perhaps fed by two or three streamlets and a dozen springs from the adjacent bluffs, and drained into the main river, or into one of its numberless sloughs, through a deep-cut runnel in the alluvial sands and silts. Finally the lake is filled with the sediment delivered by its streamlets and brought over its banks during freshets, and only an indefinite impression and a meandering stream way remain to tell of its former existence. Thus each cycle of shifting is completed.

One of the earliest generalizations in geologic doctrine grew out of observations on the manner in which rivers build alluvial plains. As such plains lie within reach of the river and suffer overflow by freshets, or at least by great floods, geologists have applied to the alluvial plain the name "flood plain." Nature has thus inscribed in the valley of each river, and in that of every smaller stream that is conditioned in the usual way, a conspicuous and ineffaceable flood mark. This flood mark is the fertile bottom land of which the pioneer dreamed, the alluvial land upon which the early settlement was founded and on which the modern city is located, the flat lowland over which the engineer builds railways, the zone upon which population is massed.

The flood plains of scores of rivers are annually overflowed. The floods of the Nile are seldom disastrous, because the customs and industries of the *fellahin* are adjusted to the conditions growing out of the remarkably uniform cylce through which that river annually passes. The great rivers of the Orient are more erratic, and once or twice, or even five times, in each decade the capricious Ganges, the powerful Brahmapootra—"terrible son of the Brahma"—the muddy Yang-tse-Kiang, and the loess-tinted Hoang-Ho, burst their barriers, devastating the low-lands and destroying human lives by scores, or even by thousands. The annual cycle of the Mississippi is far less uniform than that of the Nile, the floods vary widely in date and in height,

and prevision is handicapped by the levees, both natural and artificial, which protect the lowlands—until the crevasse opens. Yet the customs and industries of the delta country are so well adjusted to the conditions growing out of the variable regimen of the river that the losses from overflow involve property rather than life. The planters, with their families and dependents, resort to upland habitations, take refuge on the higher levees and "tow heads," or fly to the "gin houses," whose strong supports of framed timbers resist the force of the flood. And the watchful planter, who has learned the strength and the weakness of the mighty river, controls it by a sand bag here, a barrow of earth there, a handful of knot grass yonder; for if the feeble but timely check be not applied, the waters quickly gain such strength as to defy the skill of engineers and the wealth of States, as at the Bonnet Carré, the Nita, and other crevasses.

Every-day experience shows that floods are not confined to the greater rivers. They affect as well the smaller ones and their tributaries, down to mill streams and even to storm runnels; and the smaller streams are so many that the aggregate effect of their floods is large. Once or oftener during each decade a cry of distress comes from Cincinnati, for the basements of business houses built upon the flood plain are inundated and the residents of the city front are driven from their homes by the prodigious floods of the Ohio; once or twice in each decade East St. Louis and the part of St. Louis standing on the Mississippi alluvium are flooded; from three to five times in each decade the trans-Mississippi traffic at Dubuque is stopped because the flood waters submerge the railway tracks and extinguish the locomotive fires; and no year passes without records of disaster in dozens of towns and villages built on the flood plains of smaller streams. And the flood not only works destruction directly; it sows the germs of malarial and enteric disorders by which human life is shortened.

The experience of a decade shows that exceptional floods occasionally inundate a part of the flood plain which the usual vernal freshet barely reaches. On May 27, 1881, passengers on the first train south from Council Bluffs after a memorable freshet in the Missouri River, viewed an impressive but pitiable spectacle. The extensive bottom land was plastered with mud and sand; sites of farm houses were marked by piles of débris and by ruined chimneys; staunch barns were undermined, tilted, and rent with unequal settling, their doors and lower planking were torn away, and banks and bars of rotting grain marked the direction of the flood; the great corn cribs, hundreds of feet in length, were represented only by heaps of half-decayed and sprouting corn; the fences were reduced here to scattered timber, there to tangled loops of barbed wire clinging to the stronger posts and clasping the carcasses of cows, horses, and swine; the railway track of a month before was scattered to right and left in hundred-yard links of rails and ties, in bent and twisted rails still grasped by a tie or two, or in scattered ties and broken fish plates—in short, the fair land of a month before was replaced by a picture of utter desolation, and the air was poisoned by reeking mud, rotting grain, and decaying flesh. This is but one of many reminders that man may not encroach upon the domain of a river with impunity.

The recorded experience of a century shows that floods unprecedented in memory or in written history sometimes come. Throughout May, 1889, the rainfall in the drainage basin of the Potomac River was exceptionally heavy and continuous, and the ground became saturated to an exceptional degree; and during the closing days of the month heavy showers or persistent rains chanced to fall in the basins of the main stream and its tributaries in such order that the resulting freshets culminated simultaneously. The consequence was an unprecedented flood. water rose from six to eight feet above the level reached by the highest flood previously known; the canal and railway skirting the river were washed out at many points, so that traffic was stopped for many days on the railway, and the canal was so nearly destroyed that it has not yet been restored; lock houses supposed to be far beyond the reach of the highest freshets, and locks supposed to be indestructible, were swept away. Over the site of "the log dam"—a structure at Great Falls designed to protect the canal from great freshets—standing above all previous flood marks and above the flood plain of the river as well, the water rushed in a seething torrent seven or eight feet deep, sweeping away the woodwork and most of the masonry of the

structure. The broad slack-water estuary at Washington was transformed into a rushing tide which the most powerful steam tugs were unable to stem, and which carried schooners into the broader estuary below in spite of the aid of tugs and anchors; and the water rose in the city until boats plied on Pennsylvania Avenue between the Capitol and the Treasury, and until cellars and basements were flooded and stores of goods were destroyed in the very heart of the capital. Measurements showed that the discharge was at the rate of more than 600,000 cubic feet per second—a discharge at least one and one third times that of the greatest freshet previously recorded, nearly 40 times that of the average for the memorably wet season of 1889, and nearly 600 times that of minimum low water in the same river. Fully to appreciate this flood, it should be remembered that while the drainage basin of the upper Potomac is less than one per cent. of that of the Mississippi, the discharge during this flood closely approached the mean annual outpour of the great river. builder of a bridge is not satisfied to make his structure strong enough to bear the expected load, but provides for the unexpected by applying "a factor of safety" of three, or five, or even ten times the anticipated strain; and unprecedented floods like that of the Potomac during 1889 remind builders upon the flood plains of rivers that their structures too require a factor of safety.

The lessons of a millennium of observation, those of scientific principle, and those of current experience, are all the same; but they are either carelessly conned or recklessly ignored by short-sighted men. The spider weaves her web across the well-trodden pathway, to be rent and destroyed by the next passer; the ant, despite its high insect intelligence, persistently burrows in the roadway, unchecked by the passing wheels, until its little life is crushed out; the field bunting busies herself in building a nest in the stubble, regardless of the approaching turns of the plow, which must shortly wreck the tiny domicile; the squirrel hides his hoard of nuts a rod from the brink of an advancing railway cut, where it must be undermined on the morrow. Better things might be expected of reasoning man; yet, with equal faith in the fixity of the earth and with equal blindness to the inevitable, he builds his house upon the river sands below nature's unmistak-

able flood mark. The contemporaries of Daniel Boone and Davy Crockett located their log cabins on the flood plains a yard below lodged driftwood, and their descendants still defend the preemption despite the annual inundation. Along the Ohio and in the lower Mississippi region, scores of pioneers made their homes on the very spots on which their flood-borne flatboats grounded, and were naively surprised when the waters of the succeeding Spring washed their floors. During the past Summer a residence on an island in Reelfoot Lake was placed 10 feet above lowwater mark, while the mud of the 1890 flood still coated the neighboring cypress boles 18 feet above the lake. Verily, the short-sighted dumb creatures may find exalted precedents!

The first requisite for protection against a maleficent agency is just appreciation of its magnitude; the second is acquaintance with its mode of operation. The magnitude of the evils of fire, famine, war, and pestilence has long been appreciated, and their modes of operation have been so thoroughly studied that means of protection have been devised; but, while the magnitude of the flood was appreciated in the olden days, its operations were not analyzed until men, blinded by the conceit born of successful conquest in other directions, forgot its power and crowded into its proper paths, much in the same way that the devotees of a ghastly cult threw themselves before their Juggernaut.

Yet the ways of the flood are now so well known that its ravages may easily be escaped, if only its potency is appreciated. River floods may be controlled, expensively by storage reservoirs for storm waters and melted snows (which should be utilized also for irrigating lands and as sources of power), partially by forest-planting about head waters and by deforesting the deltas and lower flood plains, and temporarily by levees and cutoffs. But, under existing social and commercial conditions, these methods, which might indeed be applied locally, will probably not be adopted, either during this century or the next, over the 150,000 square miles of bottom lands skirting the minor rivers and mill streams in the eastern United States. Still, floods may be successfully opposed or escaped. Railways and wagon roads may and must be laid on the flood plains of rivers; but the embankments, and trestles, and bridges should be raised not only

above the latest freshet mark, but well above the great natural flood mark found in the plain itself, and the reciprocal effects of embankments and other structures on future freshets should be cautiously reckoned. Farms may be and ought to be located on fertile bottom lands enriched by annual or decennial overflow; but the farmer should dig deep for his foundations and build his superstructures strong and high. On every flood plain of eastern America he should provide for the loss of crop and fences once in three, or five, or ten years; and both common humanity and economic policy urge that dumb beasts should be pastured and fed on the uplands, so that the fertile river bottoms may be devoted to their best use, namely, the production of plant crops. Cities and towns ought not to be built on the flood-ridden and miasmatic lowlands; yet as they have been in the past and will be in the future, the townsman, like the farmer, should build high and strong, and hold himself ready to remove his family and carry his goods to upper stories. And the flood-swept bottom lands of the American rivers afford opportunity for a kind of business curiously neglected in the past, though destined to success at no distant day; namely, insurance against floods.

The great desideratum is general recognition of the facts—which are demonstrated by the observations of thousands and gainsaid by none, though ignored by multitudes—that rivers bear their own flood marks in the alluvial plains by which they are skirted, and that men occupy these plains at their peril.

W J McGEE.

# The Forum.

## MAY, 1891.

## STATE RIGHTS AND FOREIGN RELATIONS.

"Polonius-My Lord, I will use them according to their desert.

"Hamlet—God's bodykins, man, better; use every man after his desert, and who should scape whipping? Use them after your own honor and dignity; the less they deserve, the more merit is in your bounty."

To the people of the United States and their government has been committed the great charge of maintaining peace and order over a vast domain, and to-day the mass of human interests in our land and the responsibility for their proper care and conduct are not exceeded, if equaled, in any other empire on earth.

The unit of our system is the individual man, and to preserve him in the possession of absolute civil and religious liberty we have adopted a system of government which, by limiting and distributing its powers, prevents their consolidation and the growth of tyranny. Ours is a government of laws, and to quote from the golden opinion delivered by the late Mr. Justice Miller -clarum et venerabile nomen-in the Arlington case:

"No man in this country is so high that he is above the law; no officer of the law can set that law at defiance with impunity; all the officers of the government, from the highest to the lowest, are creatures of the law, and are bound to obey it. It is the only supreme power in our system of government, and every man who, by accepting office, participates in its functions, is only the more strongly bound to submit to that supremacy and to observe the limitations which it imposes upon the exercise of the authority which it gives. Courts of justice are established not only to decide upon the controverted rights of the citizens as against each other, but also upon rights in controversy between them and the government, and the docket of this court is crowded with controversies of the latter class."

One of the chief and enduring purposes for which the Constitution of the United States was ordained is the establishment of justice. Indeed, this was the great end of the system as organized, and if it should ever fail the system would perish. All persons within the territory of the United States under the sanction of admitted public law owe it allegiance: the citizens owe it permanent allegiance, the resident foreigners owe it temporary allegiance. All alike are subject to its laws and all alike are entitled to the protection of those laws. It is believed that this great function of administering justice has on the whole been honorably and fairly executed by the officials into whose hands the duty has been committed. Our courts of justice have been open to all. No discrimination by reason of nationality, or race, or condition of fortune, can be found upon our statute books or is indicated by the recorded judgments of our courts. With or without treaty stipulation, no case can be found of denial of justice, either by administration or by color of the statute, against a foreigner; on the contrary, no more patient, laborious, and learned decisions upon the rights of person and property can be adduced than those in which foreigners have been interested parties.

I am aware of no case until the present time in which indemnity for personal injuries inflicted upon a foreigner within our jurisdiction has been demanded by a foreign government from the United States by reason of the failure of justice in its judicial courts. Of the case in which indemnity is stated to have been demanded very lately by Italy of the United States for the killing of possibly two alleged Italian subjects in the city of New Orleans, I intend to say nothing at present, as the matter is pending in negotiation and is still undergoing the usual and proper investigation by the Executive Department. I desire to discuss, upon principle, the measure of our liabilities for injuries inflicted upon individuals by other individuals within our juris-

diction, and I shall not refer to the New Orleans case or to the unduly excited and unprecedented action of the Italian government in relation to it as an illustration of the law to which the American people intend to adhere.

I shall draw attention to the two cases in which, and in which alone, an attempt has been made to substitute for the remedies and redress always obtainable by an appeal to our local courts of justice, a demand upon the government of the United States for pecuniary compensation in the class of cases alluded to—one by Great Britain in 1878, and the other by the Chinese government in 1885. The answer of the government of the United States in both cases was the same; and it may be proper to note that in the English demand no reference was made to the existence of treaty stipulation for reciprocal protection and security, as set forth in the treaty of 1815, which is still in force between the two countries, while in the case of the Chinese demand, the claim was based expressly on the stipulations of treaties between the two countries.

A score or more instances can be found, in existing treaties between the United States and foreign nations, of stipulations for securing to citizens of each nation, residing within the territory of the other, the enjoyment of all the privileges of the most favored nation and perfect equality with the natives. These stipulations, while varying somewhat in form, are in substance equivalent, and in none of them is a greater degree of care, diligence, and active protection required of the government of the United States than is bestowed by it upon its own citizens. The grant of assured protection is almost invariably accompanied by the condition that the individuals so protected shall submit themselves to the conditions imposed upon the natives, or, in the phraseology of our treaty with Italy, that they shall receive protection "upon the same terms as the natives of the country, submitting themselves to the laws there established."

In no case is a separate or special tribunal stipulated for on either side; the same laws that control the natives, and the same courts of justice that administer those laws and are resorted to by the natives, alone are mentioned. I except, of course, those oriental countries in which extra-territorial jurisdiction is con-

ceded to our consular and diplomatic officers in all cases where our citizens in those countries are concerned. When, therefore, in the United States, an injury to person or property has been sustained by an alien here resident, his treaty rights, or his rights under international law and the usage of civilized nations, are the same as those that are available to any citizen of the United States. No treaty was ever entered into by the United States with any nation which stipulated for the enforcement of laws discriminating in favor of the subjects of any foreign government residing in the United States, or entitling them to any other or any greater protection than is accorded to the citizens of the most favored nation, or to our own citizens.

As one result of the untrammeled migration and intermingling of the different populations of the world, facilitated by the cheapness and freedom of locomotion of the present day, we find unhappily that immigrants to the United States not infrequently bring with them the personal, social, political, and sectarian issues and differences which agitate the countries from which they come. In this freedom of intercourse and in the very easy acquisition of American citizenship, we can discover evidences that our domestic policies, as well as our foreign policies, are liable to be improperly colored and influenced by considerations, prejudices, and sympathies with which, as a nation or internationally, we should have nothing to do; which are invasive, if not destructive, of that national independence and autonomy essential to the character, honor, and welfare of the United States of America; and which cannot fail to impair our reputation for disinterestedness and our consequent weight in the council of nations. It becomes, therefore, manifestly our duty as citizens of a constitutional republic to recur frequently to those principles of our Constitution which are essential for the preservation of our national polity, and to estimate at their proper value the duties and responsibilities inherent in American citizenship.

To this end there must be united insistance that our national polity should not be obscured or displaced in the mind of any official charged with the duty of representing this government, but that the keeping of it clearly in view should be regarded as the prime duty of all agents of the American people. Fortunately and wisely, we have thus far steered clear of "entangling alliances," with the single and limited exception of our treaty of 1846 with New Granada respecting the transit of the Isthmus of Panama; and by thus following the policy of careful abstention from all interference in the domestic questions and local issues of other nations, we are enabled more consistently to check and repel any impertinent or pragmatical attempt by foreigners to intermeddle with our domestic policies or to dictate alterations in our carefully-arranged distribution of powers. It may as well be understood that, desirous as we are of pursuing policies of peace, comity, and reciprocal advantage with all nations, we will never so lower the standard of our independence as to change the form and principles of our government to accommodate strangers who come among us voluntarily and in pursuit of their individual tastes and fortunes.

The establishment of the treaty power under the Constitution is clear and explicit. No State can enter into any treaty, alliance, or federation; and the President has power, by and with the advice and consent of the Senate, to make treaties, provided two thirds of the senators present concur. To the President also is given power to nominate, and, by and with the advice and consent of the Senate, to appoint ambassadors and other public ministers and consuls. He receives ambassadors and other public ministers and takes care that the laws are faithfully executed. The judicial power extends to all cases in law and equity arising under the Constitution, the laws of the United States, and the treaties that are made under their authority; and in all cases affecting ambassadors and other public ministers and consuls, the Supreme Court has original jurisdiction. In their foreign relations the United States are thus to be exclusively represented by the executive branch of the government.

A treaty is a compact between independent nations, and depends, for the enforcement of its provisions, on the interests and honor of the governments which are parties to it. With this, how ever, the judicial courts have nothing to do, and they can give no redress; but the treaty may contain provisions conferring upon those citizens or subjects of one of the nations that reside in the territorial limits of the other, rights which are capable of enforce-

ment, as between private parties, in the courts of the country. Under our system of separation and distribution of powers between the departments of the government, the Executive cannot justly exercise powers assigned to the Judiciary, nor the Judiciary powers belonging to the Executive.

The control of the foreign intercourse of the country has thus undoubtedly been conferred exclusively upon the federal government, and the sixth article of the Constitution, to exclude all possibility of obstruction, by States or their officers, to the execution of treaties, expressly states:

"All treaties made or which shall be made under the authority of the United States shall be the supreme law of the land, and the judges in every State shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding; and all executive and judicial officers, both of the United States and of the several States, shall be bound by oath or affirmation to support this Constitution."

The recital of these express mandates of the Constitution, binding equally the judges of the State courts as well as those of the United States courts to support, under oath, the execution of treaties, indicates unmistakably the intention to employ State tribunals equally with those of the United States to compel obedience by citizens everywhere in the United States to the compacts so made with foreign nations. It permits no doubt to remain that the avenues of public justice everywhere in the United States are equally open to all persons, and that resident aliens are to be treated precisely like our own citizens.

Treaties and acts of Congress passed in pursuance of the Constitution are named together as the paramount law of the land. No superiority is, in terms, assigned to one or the other, but every power can be exercised only under the limitations and modes prescribed by the Constitution, and in conformity with those limitations. A treaty is no more the supreme law of the land than is an act of Congress, as is shown when the act of Congress vacates pro tanto an inconsistent prior treaty. Whenever, therefore, an act of Congress would be unconstitutional, as invading the reserved rights of a State, a treaty to the same effect would be unconstitutional. The extent of treaty powers, as expressed in the Constitution, is unlimited in terms, except by

those restrictions which are found in that instrument against the acts of the government or of any of its departments, and against those arising from the nature of the government itself and that of the States. It would not be contended that the treaty power extends so far as to authorize what the Constitution forbids, or any changes in the character of the national government or in that of the States. A departure from the structure of our institutions, by subjecting the State governments to the control of Congress in the exercise of ordinary and fundamental powers heretofore universally conceded to them, would be as unwarranted if it were sought to be accomplished under the form of a treaty as if it were sought under an act of Congress.

Immediately after the promulgation of the last three amendments to the Constitution, Congress proceeded to legislate for their enforcement, but in the then prevalent sectionalism which controlled the two Houses, the class of laws called "reconstruction measures" were so colored by the desire to extend their power beyond the just limits of the amendments on which they were professed to be founded, that the Supreme Court, by a series of decisions, declared the greater part of such legislation to be invalid because it is unwarranted by the Constitution and destructive of the symmetry of our government. Under these decisions, while recognizing fully certain prohibitions against the action of the States, the courts have repeatedly decided that Congress cannot confer jurisdiction over offenses committed by individuals against other individuals without warrant of law or in violation of law. In the case of Cruikshank, Mr. Justice Bradley, referring to that part of the Constitution under discussion, said:

"It is a guarantee against the exertion of arbitrary and tyrannical power on the part of the government and legislature of the State, not a guarantee against the commission of individual offenses; and the power of Congress, whether express or implied, to legislate for the enforcement of such a guarantee, does not extend to the passage of laws for the suppression of crime in a State."

The Supreme Court took the same view in considering the same case, and said:

"This provision does not add anything to the rights of one citizen as against another. The duty of protecting all its citizens in the enjoyment

of an equality of rights was originally assumed by the States, and it remains there,"

In 1886 one Baldwin, together with others, was charged with a conspiracy illegally to deprive certain Chinese subjects of equal privileges and immunities secured to them under existing treaties with China, and the case came before the Supreme Court under a writ of habeas corpus. The court sustained its ruling in the case of the United States against Harris (one of the series referred to, decided in 1882), saying that that case had been carefully considered at the time and that subsequent reflection had not changed its opinion as therein expressed. The court decided in the case before it that "the offense of the defendants was exerted against the Chinese people, and not against the government in its efforts to protect them." In his dissenting opinion Mr. Justice Field deplored, as the result of the decision, that "no national law exists which can be invoked for the protection of the subjects of China in their right to reside and do business in this country, and that the same result must follow with reference to similar rights and privileges of the subjects or citizens of other nations with which we have like treaty stipulations," and declared that "the only protection against any forcible resistance to the execution of these treaty stipulations in their favor is to be found in the laws of the different States." But the fact remains that the treaties are made expressly binding by the Constitution upon all State judges, anything in the Constitution or laws of any State to the contrary notwithstanding; and when absolute failure of justice can be shown to have arisen from the action or non-action of the State tribunals, then, and not until then, it will be proper for the Executive to consider whether Congress should not indemnify the injured parties by reason of the failure of this government to execute, substantially and in good faith, the compact entered into with a foreign nation. As the measure of justice and protection stipulated for in the treaty is to be the same in the case of foreigners as in the case of citizens and natives of this country, it is difficult to see a cause of complaint when the cases of both are submitted to the same tribunals for decision.

The principles of law and justice, as administered in the

courts of the United States and in the courts of the several States, are derived from the same sources, and both are founded upon those rules of justice which are recognized in all civilized countries. The decisions of those courts are mutually cited as authority in either and in both. It may be said of the judges who preside over them and of the juries who try in them, in the words of Chief Justice Taney in the case of Crandall against Nevada: "For all the great purposes for which the federal government was established, they are one people, with one common country; they are all citizens of the United States."

The federal judges not infrequently have distinguished themselves by prior service in the State courts; the personnel of the bar is the same in both jurisdictions; the juries are drawn at large from the same communities, possess the same qualifications, and not uncommonly serve alternately in either court. The foreigner in our country who seeks redress for his private injuries has the advantage over our native citizen of electing in which jurisdiction—State or federal—he will pursue his remedy. It is difficult, therefore, tried by any test or fact or law, to discover wherein there is any defect in the execution by the United States of its stipulations with foreign nations to give to their citizens or subjects the equality of rights and privileges secured to our own citizens.

I have referred to the case of Tunstall, the correspondence in regard to which was closed by a letter addressed in June, 1885, by the Secretary of State to the British Minister at Washington. J. P. Tunstall was a British subject domiciled in New Mexico, where he was carrying on business. He was murdered in the year 1878, and an investigation by a special agent of the Department of Justice disclosed that three persons witnessed the murder, and that two of the three committed it. Two of these three were afterward killed, and there was no knowledge that the survivor had ever been brought to justice for his complicity. In 1880 Sir Edward Thornton presented, under instruction of his government, a claim on behalf of the father of Mr. Tunstall for such compensation as, upon examination of the injury and losses, should be found to meet the justice of the case. The liability of the United States was not admitted by Mr. Evarts, then Secre-

tary of State, nor by Mr. Blaine, his successor, nor by Mr. Frelinghuysen; but the last-named secretary suggested to the British Minister, in 1882, to refer the claim of Tunstall, under the authorization of Congress, to the Court of Claims or other judicial resort. The suggestion was rejected by Her Majesty's government because the proposed adjudication would not be based upon a prior admission of the liability of the United States in the premises, subject to an establishment of the facts after judicial inquiry. Upon a revival of the demand in April, 1885, the position of the United States in respect to such claims was fully stated by the Secretary of State, and it will be found at length in the volume of "Foreign Relations" for that year. The similarity of our institutions and laws with those of Great Britain was stated with numerous illustrations, and the annals of English jurisprudence were referred to as thoroughly sustaining the position taken on behalf of the government of the United States.

I can do no better than to transcribe from that correspondence the following paragraphs:

"Appealing to principles acknowledged in common in England and in the United States, it is maintained that in countries subject to the English common law, where there is the opportunity given of a prompt trial by a jury of the vicinage, damages inflicted on foreigners on the soil of such countries must be redressed through the instrumentality of courts of justice and are not the subject of diplomatic intervention of the sovereign of the injured party. . . . Prior to the occurrences now under consideration, there must have been many cases in which British subjects supposed that they had suffered loss through the negligence or the malice of subordinate officers of the different States and Territories composing this Union, but no record can be found, at least on the files of this department, of cases in which, when redress could be had by appeal to local courts of justice, an attempt has been made to substitute for such redress a demand upon the government of the United States for pecuniary compensation. The same may be said of the many cases in which citizens of the United States may have suffered, or claim to have suffered, injury in Great Britain from the conduct of British officials. When such injury was inflicted upon the high seas, or in foreign uncivilized lands, and especially if inflicted by the armed military or naval power directly emanating from the sovereign executive, then it was properly regarded as the subject of diplomatic intervention; but a careful search in the records of this department discloses no diplomatic appeal for pecuniary compensation for injuries claimed to have been inflicted on American citizens when on the soil of Great Britain."

"The practical result of this fair dealing is even more marked in this

country than in England. There are reported in our books multitudes of cases in which local officers of justice have been sued by foreigners in our courts for false imprisonment, or for malicious prosecution, or for assault, and this must needs be the case in communities like ours, in which a large proportion of the population consists of foreigners unfamiliar with our laws. In not one of these cases, however, has it ever been maintained that the foreign plaintiff had not at least the same privileges awarded to him as he would have had if he had been a native citizen, nor can the most jealous scrutiny of the proceedings show in a single case any misstatement of law to his disfavor. The first instance, in fact, in which, instead of an appeal to the courts thus open, diplomatic intervention through a sovereign is urged, is that which we now have to discuss."

"To accept the position of the British government in this matter would, moreover, lead to utter confusion in the constituted arrangements of our system, which, like that of England, sedulously maintains the executive, judicial, and legislative departments distinct from each other. The claim now put forward, if allowed, would usurp judicial functions by the executive and legislative branches, and would substitute a government of will for a government of law. Private loss and injury ensue from temporary disorders and breaches of the peace under any government."

In 1878, 3,000 loaded railway cars were destroyed by a mob at Pittsburg, Pennsylvania. This property must have belonged to a variety of persons, probably of different nationalities, but no one who lost his property nor the relatives of any who lost his life (and many lives were lost) ever pretended to hold the United States government responsible.

In March, 1884, the city of Cincinnati was for three days the scene of arson, pillage, and bloodshed. In the riot forty-five persons were killed and a greater number were wounded. The county court-house and the valuable records it contained were burned, the jail was wrecked, and a government of laws was temporarily laid prostrate. That among those killed were foreigners is well ascertained, yet no suggestion of indemnity was ever made by a foreign government. To quote again from the correspondence:

"Under no aspect of the case is there any right under our law to redress such injuries as Mr. Tunstall suffered which is not as open to a foreigner lawfully within the United States as to any one of our own citizens. There is no discrimination between them. . . . 'The state,' says Sir R. Phillimore ('International Law,' II., 4) 'must be satisfied that its citizen has exhausted the means of legal redress offered by the tribunals of the country in which he has been injured. If these tribunals are unable or unwilling to

enter energetically upon his grievence, the ground for interference is properly laid; but it behooves the interfering state to take the utmost care—first, that the commission of the wrong be clearly established; secondly, that the denial of the local tribunals to decide the question at issue be not less clearly established. It is only after these propositions have been irrefragably proven that the state of a foreigner can demand reparation at the hands of the government of his country.'"

And this position, as was pointed out, was sustained by Chief Justice Waite in the case of New Hampshire against Louisiana as follows:\*

"No principle of international law makes it the duty of a nation to assume the collection of the claims of its citizens against another nation if the citizens themselves have ample means of redress without the intervention of their government. Indeed, Sir Robert Phillimore says in his 'Commentaries on International Law,' Vol. II., page 12, 'As a general rule the proposition of Martens seems to be correct, that the foreigner can only claim to be put on the same footing as the native creditor of the state.'"

Finally, upon a full review, the liability of the United States, either directly toward the representatives of the murdered man or internationally toward Her Majesty's government, was denied.

In the case that gave rise to the Chinese demand, 28 of their countrymen were killed outright, 15 wounded, and many more driven from their homes, which were pillaged or destroyed by a band of riotous individuals at Rock Springs, in Wyoming Territory. An article of the Chinese treaty provides that "Chinese subjects, visiting or residing in the United States, shall enjoy the same privilege immunities, and exemptions in respect to travel or residence : may there be enjoyed by the citizens or subjects of the most favored nation." To this demand, reply was made that it had been ascertained that the assailants consisted of a lawless bane of armed men-discontented mining laborers who had previousl sought to induce the Chinese to join with them in a concerted strike for higher wages, and who had become angered by the rejection of their overtures. This was the only motive miscernable for the assault, or alleged in the reported evidence. then neither side, among assailants or assailed, was there any repa carefuntive of the government of China, or of that of the United on America, of that of the Territory of Wyoming. There was,

<sup>&</sup>quot;The prac \*108 U.S. Reports, page 90.

therefore, no official insult or wrong, as there could not be. Whatever occurred was between private individuals. It was, moreover, absolutely without national character. The domestic element of an ordinary civil disturbance was wanting. The assailants, equally with the assailed, were strangers in our land. In strict truth, the hospitality of a friendly country, no less than the rights of peaceable sojourners therein, may be said to have been outraged by a body of aliens, who, being permitted by the generosity of our laws to enter our borders and roam unchecked and at will throughout our jurisdiction, freely and profitably selecting their places of abode and finding occupation therein, abused the privileges thus accorded to them and committed gross breaches of the public peace, suddenly, and doubtless with the knowledge that nowhere within summons could any police organization be found in sufficient force to stay their criminal hands.

The volume of "Foreign Relations" for 1886 contains the full history of this demand for indemnity and the reasons for its rejection. In that correspondence with the Chinese Minister, the same principles were laid down as had been cited in the reply to the British Minister in Tunstall's case. It was said:

"To the judiciary branch is committed the administration of remedies for all wrongs, and its courts are open, with every aid they can devise, to secure publicity and impartiality in the administration of justice to every human being found within their jurisdiction. Providing thus a remedy for all individuals, whether many or few, rich or poor, and of whatever age, sex, race, or nationality, the question of liability for reparation or indemnity for losses to individuals, occurring in any way, must be settled by the judgments of the judicial branch, unless the act complained of has been committed under official authority in pursuance of governmental orders to that end. The government of the United States recognizes in the fullest sense the honorable obligation of its treaty stipulations, the duties of international amity, and the potentiality of justice and equity, not trammeled by technical rulings nor limited by statute. But among such obligations are not the reparation of injuries or the satisfaction by indemnity of wrongs inflicted by individuals upon other individuals in violation of the law of the land. Such remedies must be pursued in the proper quarter and through the avenues of justice marked out for the reparation of such wrongs. . . . I should fail in my duty as representing the well-founded principles upon which rests the relation of this government to its citizens, as well as to those who are not its citizens and yet are permitted to come and go freely

within its jurisdiction, did I not deny emphatically all liability to indemnify individuals, of whatever race or country, for loss growing out of violations of our public law, and declare with equal emphasis that just and ample opportunity is given to all who suffer wrong and seek reparation through the channels of justice as conducted by the judicial branch of our government."

There were certain features in the case which appealed strongly to the sense of humanity, and which were communicated by the President to Congress, with a recommendation that compensation for the loss of the property destroyed should be given in a benevolent spirit; and this was done by Congress, which subsequently, in 1888, made a still larger appropriation in compensation for similar losses suffered by Chinese on the Pacific coast; but in each case the award was expressly stated to have been made ex gratiâ, and was accompanied by the most distinct denial of all legal liability, under international law or treaty, to make good losses so caused.

The importance of establishing a correct principle, and the everlasting and increasing injury of consenting to an evil principle, invest this question with gravity, for it is very evident that if the government of the United States shall admit that it is liable to indemnify individuals directly, or a foreign government acting in their behalf, for injuries inflicted upon citizens or subjects of such foreign government within the United States and in violation of its laws, and that such claimants are absolved from all efforts to obtain redress in the judicial courts, which are as open to the foreigner as to our own citizens, and where justice is administered with an equal hand to either and to both, it will create a precedent which will not merely be prolific of international dissensions, but which will impair the structure of our government, seriously disarrange the system of checks and balances under our State and federal systems, and confuse and destroy the essential boundary between executive and judicial powers which is one of the most important features in the Constitution of our government.

There is a manifest and dangerous tendency in our institutions toward centralization and consolidation of power. No remedy, therefore, for alleged evils or inconveniences should be accepted that increases this tendency, for it is in the strict enforcement of

limitations upon power and its decentralization that the best hopes, and even the possibility, of free institutions of human government can be found. If, therefore, the principles of law and the arrangements for their exercise declared by our courts to be consonant with the provisions of the Constitution and essential to the preservation of individual liberty, cannot be peaceably possessed and enjoyed by our citizens, and be acknowledged and recognized as the basis of our government, because of the presence within our borders of alien subjects and citizens of foreign powers whose personal wrongs may not be remedied to their satisfaction or to that of their government without the impairment and disorder of our system, then the time has arrived when the unquestionable and sovereign right of the United States to determine by positive law who shall be permitted to enter our gates and who shall be excluded must be exercised.

Let us ascertain our full and honorable measure of international duty, and perform it faithfully in a dignified spirit of self-respect, not yielding to compulsion, but walking steadily in the path of self-imposed obligation.

THOMAS F. BAYARD.

APRIL 13.

## THE COMMONWEALTH OF AUSTRALIA.

What significance has the formation of the new Common-wealth of Australia? Among the advantages claimed for it by its founders are national influence; national credit; defense against an aggressive foe; the development and protection of the coast fisheries; the prevention of the influx of foreign criminals and of aliens of inferior races, Chinese or Asiatics; a "higher stature before the world"; a grander name; and a scheme of empire such as isolated colonies could not hope to carry out. These benefits, it is claimed, will be secured by the adoption of a Constitution framed after those of the United States and Canada, but avoiding the undesirable features of both and providing for a federal Court of Appeal, a Privy Council, and a Parliament consisting of a Senate and a House of Commons.

Beyond all this, it is the firm belief of many that this magnificent territory, with 8,000 miles of coast line inclosing 3,000,000 square miles, and with a present population of 4,000,000, is destined to control the Pacific and, in the near future, by the increase of its manufactures, to command the trade of all that part of the world in which it lies.

It is true that there have been men of brilliant ability opposed to federation, among others the Hon. I. E. Salomons, a Queen's counsel, who on June 4, 1890, delivered in the Legislative Council of New South Wales, of which he is a member, a brilliant speech in which he opposed federation as premature, unnecessary, and full of great and critical dangers. "As to those who see in it an instrument of independence," he said, "I regret that I know nothing in the way of argument that would affect them; but I would pray this chamber, and humbly through it the whole colony, to defer as long as may be the breaking of the link that binds us to the old country." He reminded his hearers that England is the home of freedom, that her Constitution has served as a model for every independent state, and that she laid

the foundation of civil and religious liberty (Mr. Salomons himself is a Hebrew) and struck asunder the shackles of the slave. He concluded by asserting that all that is sacred, all that is really elevated and refined in the life of the colonies has come from England, and that anything that should tend to break the ties between them and the mother country would be a step in the direction of degradation.

The replies to Mr. Salomons, however, went to show that there was no intention of separation from the mother country. On the contrary, Sir Henry Parkes, the present Premier of New South Wales, who is the oldest advocate of federation, had previously asserted that, while Australia would, by its means, rise to a higher level, and occupy a larger place in the contemplation of mankind, such a movement would find a ready response in the old country, and, indeed, that England had already awakened to sympathy with it. Its object, he said, was only to secure admission "into the rank of nations that are still under the noble and glorious flag of the Motherland." And the first resolution adopted by the Australasian Federation Conference on February 13, 1890, at the Parliament House in Melbourne, was as follows:

"That, in the opinion of this Conference, the best interests and the present and future prosperity of the Australian colonies will be promoted by an early union under the Crown."

Again, on the 7th of last May, in moving for the concurrence by the Legislative Assembly of New South Wales in the resolutions adopted by the Federation Conference on the 13th of February, Sir Henry Parkes asserted that the convention had not met to draw up a declaration of independence, but that its members had been asked to assemble to frame a federal Constitution in union with the Crown of Great Britain. "The whole of the colonies," he said, "by their delegates and representatives, have declared that the time is ripe for that to be done." On the conclusion of the debate in the Legislative Assembly of New South Wales, after various postponements, on the 11th of last September the House, a very full one, adopted the scheme of union by a vote of 97 to 11, which completely put to flight all who entertained doubts similar to those of Mr. Salomons.

Referring to the proposed Constitution, Sir Henry Parkes said that the rich stores of political knowledge which were collected by the framers of the Constitution of the United States would be largely resorted to, as well as the vast accumulations of learning on cognate subjects since that time. The scheme of federal government would necessarily follow close upon the type of the Dominion Government of Canada. It would provide for the appointment of a Governor-General, for the creation of an Australian Privy Council, and for a Parliament consisting of a Senate and a House of Commons. He added:

"We have only two modern examples. We have the case of the North American colonies which revolted, and happily—happily for the world, happily for England herself—established their independence; and we have the example of the Canadian Dominion. In the American example the people of the North American colonies were about 3,000,000; in the Canadian example the population was 3,294,056 souls; the population of these colonies is certainly not less than 4,000,000. So that, if population, which is the main element of national life, is to be considered, we have a status beyond that of North America in the revolt which resulted in independence, and beyond that of the Canadian colonies when they first proposed to federate. And if 4,000,000 English-speaking people, inheriting all the advantages which belong to our nation and race—if a population of 4,000,000 of this stamp are not ripe to enter into this united system of national life, it becomes the persons who say so to point to the time when they will be."

In debating the objections to certain clauses of the Constitution of the United States, Sir Henry made reference to the fact that the executive power is vested absolutely in the President of the United States—not vested with the advice of any body, but absolutely in the President. He then went on to show how that power has been used, notably in the case of two Presidents who had reigned supreme in the United States each for eight years—President Jackson and President Grant. In comparing the advantages of a Privy Council with those of a single executive he cited the statement, made in an article by Mr. David Dudley Field, that while the Crown in England has not vetoed a measure passed by the Legislature since the reign of Queen Anne, and while the House of Commons has not withheld supplies since the Revolution of 1688, yet in America both of these powers are exercised to-day.

After referring to further quotations from the same eminent

authority—especially with reference to a scheme for the annexation of a portion of the island of San Domingo in pursuance of a treaty negotiated by an aid-de-camp, a treaty of which Charles Sumner publicly expressed the opinion that it trod under foot the Constitution in one of its most distinctively republican principles—Sir Henry went on to say that, in his opinion, the use of the executive power by the President of the United States was quite sufficient to warn the men intrusted with the duty of framing the Australian Constitution against placing that power in the hands of one man.

There can be little doubt that the probability of a European war, in which England might become involved, quickened and strengthened the determination for federation. In 1889, the Imperial government intimated to the several governments of the Australian colonies that it was prepared to send a distinguished officer to inspect the military forces of Australia. General Edwards, the officer who was sent, inspected the forces of the different colonies and reported that if the military forces of Australia were to be of use in time of danger they must be capable of being amalgamated into a single Australian army. In debate on this topic in the convention, speakers mentioned contingencies in which a federal government would be able to exercise effective authority, but which the provincial governments could not meet at all. It is impossible for the Australians to shut their eyes to the difficulties that are sure to beset their country from the multitudinous Asiatic races. The close proximity of these races to Australia, the ease with which they can visit it, their wonderful powers of imitation and invention when they have once had the track pointed out, should never be forgotten in estimating possible difficulties and dangers. Major-General Edwards pointed out the superior naval power—becoming stronger and more efficient every year—of the Chinese Empire. The Chinese have some of the finest ironclads and some of the fastest cruisers afloat, and it is well that the people of the Australian colonies should realize that they have this power so near—this power so fully armed, this power so well prepared to take advantage of all inventions and all improvements still further to arm itself. Human lives count as nothing in its calculations; and if China

is now engaging the most experienced generals from Germany, and from England itself, to train her armed bodies, having already a considerable army, and if she is fast acquiring a navy inferior to few both in quality and numbers—truly it is time that Australians understood the character of this near neighbor.

The founders of the Commonwealth, moreover, reviewed the physical and material basis for a federal government. The colonies have an immense wealth in railways, including an unbroken chain of 2,600 miles from South Australia to Queensland. This great work and its several branches cost the colonies nearly £100,000,000—a sum equal to the estimated value of British railways in 1844 (according to Mr. Acworth's article in the March FORUM). This intercolonial chain of railways would enable the federal government to transport troops to any threatened part of the coast. The Transcontinental Telegraph, which joins the Indian and Southern Oceans, and brings Australia into continuous communication with Europe and the whole civilized world, is 2,000 miles long, and for the greater distance is carried across a previously unknown country.

Australia to-day is as far advanced in civilization as any country in the world. The roads are better than any on this continent; the daily and weekly papers and the development of literature and art are far in advance of the age of the colonies or the population. The new Commonwealth has all Europe and America as a field in which to seek the improvements of the time and the means to secure them. Its present wealth is almost beyond belief, and its resources almost incalculable. It produces more than one fourth of the wool of the world-twice as much as the United States. It produces one half the tin of the world, and there is no precious metal that has not been found within its domain. Its coal fields on the coast, convenient for export to all countries, are inexhaustible. The inward and outward shipping of one port alone exceeds 2,500,000 tons per annum, and the value of its commerce with Great Britain alone exceeds £100,000, 000 sterling. The private wealth of the United States is £39 per inhabitant, of England £35.4, of France £25.14, of Germany £18.14, and of Austria £16.6. The private wealth of Australia exceeds any of these, being £48 per inhabitant. Last year's estimate of the annual industrial productions of the population, including agriculture and mineral wealth, was no less than £95,042,000. The real standard in civilization is the extent to which wealth is diffused among the population, and, judged by that test, Australia stands at the head of the nations of the world. Its cities also are among the finest of modern times. The public buildings, shops, and parks compare favorably with any in Europe or America, while the floating palaces of the Peninsula and Oriental Steamship Company and the Orient Steamship Company give weekly communication with the Old World. In out-door sports the Australians excel, and their racing establishments and courses are the wonder and admiration of all visitors from abroad. Who has not heard of the champion boatmen and cricketers of Australia? As straws show how the wind blows, so do the youth of a nation point out its future. The Greater Britain of the Pacific will under federation double in wealth and population by the end of this present century, and will attract the commerce of the rapidly-developing islands of the Southern seas.

The significance of the federated Commonwealth of Australia, as regards the United States, will very much depend upon the policy of this country's government. Up to the present time this policy has been selfish, unfriendly, and in some instances niggardly. I refer to the refusal of governmental assistance to the steamship line connecting San Francisco with Australia by way of New Zealand. This line, subsidized by the two colonies of New Zealand and New South Wales, is the only instance of the granting of a subsidy to an alien company. The steamers are owned by Americans and sail under the protection of the American flag, but notwithstanding the constant endeavor of that grasping corporation, the Canadian Pacific Railway, to divert communication from San Francisco to Vancouver, the colonies have continued their subsidy in support of the line to San Francisco.

The chief export of Australia is wool, the average American duty on which exceeds 100 per cent. But Australia has always shown a very friendly feeling toward the United States and a desire to cultivate closer relations. She has been patient under long suffering, believing that a people so astute as the Americans

will discover that they have erred in taxing raw materials and in shutting out commerce that under a wise policy would come to them. I need not point out here that the great Republic stands alone, among the civilized nations, in placing almost a prohibitory tariff on raw materials. The present head of the State Department at Washington, who is acknowledged by men of all parties to be capable of great statesmanship, will, it is to be hoped, lav aside prejudice and treat the Commonwealth of Australia as kindly and liberally as he does the Hawaiians and the Spanish-American races, by agreeing to reciprocity or by removing duties from raw materials and animal life. Australia wants American cotton, and already takes large quantities of all American manufactures: but, being shut out of the American market by a prohibitory duty, the Australians have to pay for their purchases in gold. This is contrary to all principles of sound political economy and must injure the nation that has adopted such an unwise policy.

The first direct and continuous trade between this country and the Australian colonies was in 1852. Its growth up to 1876 was steady. Then the very creditable exhibits of the colonies at the Centennial Exhibition drew attention to them. As a result of these exhibits American manufacturers sent their exhibits in turn to the Sydney and Melbourne exhibitions of 1878 and 1880. In consequence trade has largely increased, so that last year no less than 96 vessels of 99.158 tons register, with a total capacity of 185,000 tons, cleared from the port of New York for Australasia, to say nothing of the trading from the Pacific coast.

The new Commonwealth of Australia is certain to seek closer trade relations with this country. Let the great Republic meet her half way, and the end of this century will witness the greatest imaginable increase of commerce between the two richest branches of our great family. Then instead of 100 ships of 200.000 tons' capacity there will be 1,000 ships and 1,000,000 tons of exchangeable commerce. The history of both countries and peoples for the past quarter of a century shows that the increase of each in the production of wealth and in commerce has far surpassed the most sanguine expectations, and history in this case as in others will repeat itself.

The fertile islands of the Southern seas—Samoa, Fiji, the New Hebrides, New Ireland, New Guinea, and others—are all capable of producing unlimitedly maize, sugar, coffee, spices, tea, and nearly all the tropical fruits. These islands, too, in time will be peopled by the Anglo-Saxon race, and will no doubt become tributary to the new Commonwealth of Australia. Let it also be borne in mind that the six present colonies of Australia include an area equal to that of the United States and capable of sustaining as large a population. Notwithstanding the distance of 1,200 miles that separates New Zealand from the continent of Australia, it was represented at the recent Conference and took part in the proceedings, and it is to be hoped that it will become a part of the new Commonwealth. The New Zealand climate resembles that of Great Britain, but is more equable, the extremes of daily temperature varying throughout the year by an average of only 20°, while London is 4° colder than the South Island and 7° colder than the North Island. The mean temperature of the different seasons for the whole colony is in spring 55°, in summer 63°, in autumn 57°, and in winter 48°. Taking all things into consideration, there is no more desirable climate than that of New Zealand, and its inhabitants must always exercise a great, if not a controlling, influence in the future of the Southern Pacific countries.

Among the statesmen who represented the several colonies at the birth of the new Commonwealth, and whose signatures to the constitution will ever be a part of the Nation's history, are many possessing great ability. Such men as Hon. James Service, Sir Samuel Griffith, Sir Henry Parkes, Sir Thomas McIlwraith, J. M. Macrossan, and Messrs. Gillies, McMillan, Abbott, Forrest, Dibbs, and Moorehead are citizens of whom any country would be proud. Doubtless their statesmanship and patriotism has produced a Constitution that will require few amendments now or hereafter.

RODERICK W. CAMERON.

## THE UNITED STATES CENSUS.

Before proceeding to discuss the results of the eleventh census, it may be instructive and not without interest to consider what a census of the United States is, how it is taken, how it differs from a census of the European type, and what are its special liabilities to error. Historically, the census of the United States occupies a very proud position. We were the first nation of the world to institute a regular periodical enumeration of the people. Our first census was taken in 1790. The earliest census in England was that of 1801; in Ireland, that of 1811. The censuses of continental Europe came later; but they all came at last, so that to-day there is no civilized country which does not carry on this work at regular intervals.

The priority of this country in a matter of such great consequence has been made the subject of a very high eulogium by a French statistician of eminence, who declares that the United States present a phenomenon without parallel in history—"that of a people who instituted the statistics of their country on the very day when they founded their government, and who regulated by the same instrument the census of their inhabitants, their civil and political rights, and the destinies of their nation." Candor compels us to say that the praise of M. Moreau de Jonnès is not wholly merited. It was not an enlightened appreciation of the value of statistics which induced the statesmen of 1787 to incorporate in the national Constitution the provision requiring a decennial enumeration. The main, if not the sole, reason which actuated them was found in the character of the government which they proposed to set up. For by the Constitution of 1787 the States, while possessing equal powers in the Senate, were to have weight in the House of Representatives and in the Electoral College according to their respective numbers. For carrying out such a system of government a regular periodical enumeration was an absolute necessity. This, and not any felt need of accurate

statistics, led to the provision in question. Not philosophical, but purely political, considerations gave the United States priority among the nations in the institution of the modern census.

At first the census was confined strictly to its original object —that of ascertaining the number of the people for the purposes of representation or of direct taxation. Even the names of all the inhabitants were not taken; only the names of householders, with the numbers of their respective families, divided into classes according to age, sex, and color. Soon, however, the census began to grow more extensive and complicated in two different ways: first, through the multiplication of inquiries relating to individuals, upon the family schedule, and, secondly, through the introduction of altogether new subjects of investigation, such as agriculture, the fisheries, mining, and manufactures. The first of these ways of enlarging the work of the census did not involve a departure from its primary object. The earliest census had been too simple fully and fairly to secure that object. To make sure that an enumeration is correct, to be able to verify it in case of complaint or doubt, to eliminate all duplications, to supply all omissions, not a few particulars are necessary regarding each individual counted. For this purpose there are needed, at least, the name, age, sex, race, and occupation. The place of birth—whether abroad or at home, and in what foreign country or what State of the Union-may also become a decisive means of identification in case of dispute. Moreover, in order that the census may determine the natural militia of the country, it is important to have not only the number of males between eighteen and forty-five years of age, but also all ascertainable facts regarding mental sanity and physical soundness. This last consideration fully justifies the incorporation, in the family schedule, of the inquiries regarding blindness, deafness and muteness, idiocy, insanity, and permanent disabilities, which, in greater or less fullness, have long been a part of the census.

Certain other inquiries, long ago introduced into the family schedule, have not so clear a justification, according to the strict meaning and primary purpose of a census; yet they constitute no abuse of this agency, either theoretically or practically. For example, that the state may know what provision should be

made for public education, the inquiry as to illiteracy becomes of great importance. But whether we have regard to the interest and the attention of the enumerator, which should be concentrated on comparatively few subjects, or to the patience of the public, we must say that a highly conservative spirit should control the number and the nature of the census interrogatories. The commendable zeal and scientific ambition of the officers in charge may easily carry them over the line which marks the maximum value of a popular enumeration. The quality of the information to be obtained is generally of more importance than its quantity. A comparatively few interrogatories, searchingly put, carefully answered, and accurately recorded, will be worth more than a wider canvass conducted with any failure of interest and attention on the part of the enumerator, or with increasing impatience and irritation on the part of the public.

A second way in which the census has been enlarged since 1790 is through the institution of inquiries not in any sense appropriate to the family schedule, especially such as relate to industry and to certain social interests. This movement toward the addition of new schedules to the census began as early as 1810, when an awakening regard for manufactures led to an attempted enumeration of the nascent industries of the country, which was only in a faint degree successful. At three subsequent censuses prior to 1850 more or less work of the same nature was undertaken, seldom with profit. The agencies established were ill adapted to the purpose; statistical science was hardly yet born; the public interest in the results was feeble; the enumerators were inadequately instructed for their work.

In 1850 a new law was enacted for the seventh census, and a truly vast addition was made to the scope of the inquiry. The agencies established by this act constituted an improvement in some respects upon those previously existing; but they were still far from adequate to the gigantic task undertaken. In spite of all deficiencies, however, the United States census of 1850, and those of 1860 and 1870, which were taken under the same law, assumed monumental proportions, which became the admiration of all foreign statisticians. A close and critical examination of the results would doubtless have qualified this feeling in

no inconsiderable degree; yet, when all was known, for good or for ill, it remained true that the statistics collected under the act of 1850 were, in amount and quality, highly honorable to a people so young and necessarily so crude, occupying so vast a territory, and enjoying so little of scientific and political education. In preparation for the tenth census, in 1880, a new law was enacted. Again there took place a large extension of the scope of inquiry; but this time agencies as nearly adequate to the work as the wisdom of those in charge could devise were freely provided. That law was substantially re-enacted for the census of 1890, and determines the present census system.

I have said that the necessary agencies for taking this great decennial inventory, which now embraces population, wealth, taxation, industry in all its forms, transportation, education, physical and mental infirmity, pauperism, and crime, have been freely provided by Congress. The only limit now to the usefulness of this great work is found in the limited ability of any one man to grasp so many subjects at once; to make fitting preparations for a canvass of a nation of such territory and population as ours; to build in a few months, from the ground upward, the entire machinery of enumeration; to raise, organize, officer, equip, and instruct an army of fifty or sixty thousand men for this service; to set them at work on the first of June, all over the country, from Maine westward to Oregon and southward to Florida and Texas; and thereafter to keep them at work, vigorously, zealously, unfailingly, to the full completion of this mighty task. The limits spoken of are not theoretical merely. It is a question if those limits—whether as to brain power or as to will power—have not already been reached and overpassed. The labor of organizing and energizing a census is such as no man can conceive who has not himself undertaken it, or, at least. stood close by and watched the machine in full operation. Aside from the question of the superintendent's intellectual ability to comprehend his work in all its parts, and to make provision for every foreseen occasion and for every sudden exigency of the enumeration, the strain upon the nerve and the vital force of whomsoever is in charge of the census is something appalling. My successor in the tenth census, Col. Charles W. Seaton, was

literally killed by the work, and three successive chief clerks of that census died in office. The present superintendent of the eleventh census, Mr. Porter, was driven away to Europe by his physician last summer, while the work was at its height, to save his life. Taking a census of the United States under the present system, and upon the existing scale, is like fighting a battle every day of the week and every week for several months.

The reason for loading upon the decennial census of the United States such a mass of statistics, relating to so many subjects, many of them not necessarily connected with the enumeration of population or even theoretically related to it, has been twofold: first, the sparseness of settlement over large portions of the United States, making it exceedingly expensive to traverse the ground several times to obtain different classes of statistics, when, by crowding the enumerator's portfolio and the enumerator's brain, these might be collected in a single tour, though perhaps at some sacrifice of quality in the results; secondly, the real or affected doubts of certain politicians as to the "constitutionality" of establishing agencies, aside from the census, for conducting inquiries under "federal" authority, purely in the interest of statistics themselves—that is, in the interest of public intelligence, social science, and political education.

Either of these reasons would have sufficed to give the United States census its present form, if the other had not existed. Constitutional scruples would have probably existed on the part of enough congressmen in 1850 to cause the defeat of any proposition for the collection of statistics on a large scale, through a popular inquiry conducted by authority and sustained by legal penalties, if that inquiry had not been made an adjunct of the census expressly authorized and required by the Constitution. It is certain that by 1879 this sort of objection, arising from a paltry and bigoted construction of the Constitution, and from petty and disparaging views of the United States government which it is no longer possible for any intelligent citizen to maintain, had so far diminished that it would not have withstood the adoption of a better system, urged on statistical grounds. Today, let us hope, we are enough of a nation to put aside consider-

ations so unworthy, and to deal with the subject with reference to practical considerations only. As I have said in another place:

"It has become simply absurd to hold any longer that a government which has a right to tax any and all the products of agriculture and manufactures, to supervise the selling and making of 'butterine,' to regulate the agencies of transportation, to grant public moneys to schools and colleges, to conduct agricultural experiments and distribute seeds and plant cuttings all over the United States, to institute scientific surveys by land and deep soundings at sea, has not full authority to pursue any branch of statistical information which may conduce to wise legislation, intelligent administration, or equitable taxation, or in any other way promote the general welfare."

But even if we may consider as disposed of the political objection to pursuing statistical inquiry separately from the decennial enumeration provided for by the Constitution, what shall be said of the geographical objection once so formidable? It is, at the beginning, to be remarked that the sole ground of this objection is found in the greater labor and expense of traversing sparsely-settled districts several times, to collect different classes of statistics. Where population is compact, economy and efficiency are actually on the side of successive, or at least separate, enumerations. In a city, for instance, the effort of "getting about" is reduced to a minimum; and three, four, or five different enumerators, each dealing with a class of subjects with which he has, by special instruction and by frequent repetition, become more familiar, will do the work in less time, proportionally, than one enumerator undertaking to carry on the whole line of inquiry himself. Even in small towns and villages this would still hold. In rural districts the time spent in going from house to house constitutes so considerable a part of the whole period occupied, that an enumeration conducted by different sets of enumerators would necessarily be more expensive; but even in regard to this two things must be said: In the first place, the whole course of the national life has tended to reduce the proportion of the total population thus placed. At the beginning, in 1790, only 131,472 persons, or one thirtieth of the people, lived in cities of more than 8,000 inhabitants; in 1880 the residents of such cities numbered 11,318,547, or two ninths of the whole population. The relative importance of the city population of 1890 was greater still. Were small cities, small towns, and villages included, and also densely-occupied agricultural districts, we should scareely estimate the proportion of the population which could not be enumerated in the manner proposed without an appreciable increase of expense, at more than one half. To this half applies my second remark, namely, that the wonderful growth in the wealth of the whole country, in these later days, has made of smaller and smaller account the additional cost of collecting the various classes of industrial and social statistics through separate agencies, until to-day it is not worth considering in comparison with the advantages to be derived.

Those advantages are twofold. In the first place, by such a divorce of the census proper from the other statistics now taken in the census, the value of the latter would be greatly enhanced. Each class of statistics could then be taken in the time and in the way best suited to secure good results. One illustration of this, out of many that might be offered, I will select from the statistics of agriculture. The United States census is taken on June 1; but at that time the crops of the year are not harvested, consequently, it is the crops of the preceding year which are enumerated. The census of agriculture, therefore, in addition to all its other defects, starts out with being a year behindhand, and the statistics are musty before they are gathered. In Massachusetts, on the other hand, where the proposed separation of agencies has been effected with the best results, the statistics of agriculture are dated November 1, when the crops of the year are all in the barns, and the facts relating to them are fresh in the minds of the farmers. The second advantage which would result from the change proposed, would be found in the gain which the census proper would derive from singleness of aim and attention on the part of the census office and the enumerators; and perhaps, also, from a better temper on the part of the people.

It is only of the census thus constituted—that is, of the census in its original function as an enumeration of inhabitants—that I shall speak in the remainder of this article. Thus considered, we see at a glance that a census of the United States differs in its very conception from a European census. To exhibit this fundamental difference let us take the English census. Once in

ten years, as with us, the English government makes an enumeration of the inhabitants of the Kingdom. The time chosen is the night of the second of April. On or before that day the enumerator must leave at each house within his district a family schedule, which calls for the name and personal characteristics age, sex, color, occupation, etc.—of each person who on that night shall sleep in that house. The next day, namely, the third of April, the enumerator calls and collects the schedules. If, as so often happens, no one in the household can write, the enumerator acts as the friend of the family and fills out the schedule himself for them, upon the information that they give. Otherwise, he simply looks over the schedule as filled to see that it is properly made out, and "takes it up" on his rounds. Although all this is supposed to be done in one day, the enumerator, if necessary, can take a part of the second day for his collection; but every schedule has reference to the night of the second of April. If a man be travelling on that night, he is to be reported at the hotel or private house at which he arrives in the morning. Special arrangements are made for enumerating persons employed in caravans and circuses; people on canal boats and in ships at the wharves; janitors, porters, and watchmen sleeping in stores; tramps in the station houses and paupers in the casual wards. Even the poor wretches lying under the arches of bridges, on the pavements of public squares, or on benches in the parks, are, so far as possible, identified and accounted for. great army of trained officials is at work and on the watch, to seize, momentarily to fix, and, as it were, to photograph the inhabitants of the whole Kingdom at the same time; and thus, so far as human skill and ingenuity can effect, to present a picture of the population.

A census of the United States is a very different thing. As in England, the census is supposed to be taken on a certain day—with us, the first of June—but the question regarding each and every man is not where he was on that day, but where, on that day, he had "his usual place of abode." And to record the inhabitants according to this definition the enumerator is allowed, not one day only, but many days—in cities, two weeks; in rural districts, one month. The most apparent reason for this differ-

ence is the sparseness of settlement over large portions of the country. There are hundreds of thousands of square miles with us on which there is, on an average, but one house to the square mile. There are hundreds of thousands more on which the average is but two or three. Clearly, to organize a system by which the whole census work shall be done in one day, over vast, half-desert areas like these, would be an almost impossible thing.

But an even stronger reason for the difference indicated is found in the essentially political character of the enumeration with us. In Europe the interest is mainly statistical. Here the primary and principal purpose is to prepare for the redistribution of representation. Hence it follows that persons must be recorded, not where they chance to be at any given moment, but where they properly belong. By disregarding this consideration it might easily happen that a great city, like New York or Chicago, would gain fifty or a hundred thousand at the expense of other communities. There were days during the Centennial Exhibition of 1876 when Philadelphia would, according to the European system, have gained fully as much as the largest of these numbers. Such a result would justly be held a grave infringement upon the rights of the cities and States which suffered this accidental loss of population. In a word, a European census is an enumeration of the population de facto; and as the interest there is mainly statistical, this is the most satisfactory method, the results being the best that are humanly attainable. United States census attempts a de jure enumeration of the people, and accepts a certain amount of error, statistically, as the price to be paid, since, whenever a definition of residence is introduced into the count, there is always a liability that a person may be taken in both of two places, or that between the two he may be left out of the enumeration altogether; nor is there any assurance that the omissions will balance the duplications. The tendency on one side may be two, three, or four times as great as on the other. The liability to error of one kind or the other is vastly greater in a city or a factory town than in a longsettled agricultural district. It is often greater in one town or city than in another; for example, in New York, where people largely reside in hotels, flats, or boarding-houses, and where intermural migration is incessant, than in Philadelphia, where the people, to an almost unparalleled degree, live in their own houses, and where movement within the city is exceptional.

The liability to error in a census of the United States, as a whole, is to-day many fold what it was forty years ago. If one is disposed to ask why, let him consider not only the changes wrought in the proportion between city and rural populations in that time; not only the changes in city populations themselves as to their modes of living; but the astonishing dimensions to which the annual movement from city to country in May and June, and from country to city in October and November, has recently attained. Let him contemplate the great Summer cities which have been built up all along our coasts, the hundreds of hotels and boarding-houses among the mountains, the thousands of Summer villas along the rivers and upon the lakes, which are occupied only in Summer; and he will find no difficulty in accepting the statement that has been made.

To the professional statistician the only thoroughly satisfactory census is one which makes a de facto enumeration of the population at the very best time that can be taken for that purpose a census that takes an instantaneous photograph of the people as they are at a given moment; but the political reasons which have given form to the United States census are likely long to prevent the introduction of such a style of enumeration among us. It may come about in time that the people, out of patience with the inevitable errors of the traditional census, and weary with the quarrels and recriminations between States and cities necessarily attendant upon it, will unanimously agree to waive the theoretical objections to the photographic method, as possibly, probably, and in some degree certainly, affecting unequally the basis of representation, and will accept the latter system as good enough for political purposes, and as vastly more satisfactory from all other points of view.

FRANCIS A. WALKER.

## RECIPROCITY-WHY SOUTHWARD ONLY?

ALL trade is advantageous to those engaged in its exchanges. It is profitable to him that sells and to him that buys. Without this reciprocity of benefit trade could not exist. The sum of its benefits is in proportion to the value of the articles exchanged, and depends upon the presence or the absence of obstructions in the way between consumer and producer. If obstructions, either natural or artificial, should prevent all trade, domestic and foreign, civilization would be extinguished and human life would go out with it. The converse also is true. If no obstructions, either natural or artificial, should exist, prosperity would touch its highest possible point, and civilization would attain its highest possible development. The mutual profits derived from trade are not restricted to any particular articles nor confined to any particular country. They are not controlled by degrees of latitude, of longitude, or of altitude. Trade is the same in the frigid, the temperate, and the torrid zone. It owes no allegiance to any king, prince, potentate, or power; and yet it is the surest and best supporter of all. It speaks a universal language which, like that once heard at Pentecost, is understood by every people in its own tongue. Wherever it goes—north, south, east, or west; at home or abroad—its message is "On earth, peace; good will toward men."

Many of our statesmen have been deeply impressed with the conviction that though trade at home is a benefit, foreign trade is an unmixed evil, and that to prevent it the oceans should be set on fire, and our sailors should all be hanged rather than be permitted to engage in this hurtful traffic. It is gratifying to see the relaxation of this ironclad idea, even to a very limited extent. This relaxation is one of the happy results of "the campaign of education," whereby the country is now thoroughly aroused. The Executive and the Department of State have impressed upon the attention of Congress and of the country the great

importance of free trade, in certain articles, with Mexico, Cuba, Central America, and South America. They are thoroughly convinced that it would be mutually advantageous for us to take, free of tax, the sugar, coffee, tea, molasses, and hides produced in these countries, and for them to take from us agricultural implements, machinery, locomotives, steel rails, structural iron and steel, and railway cars.

This particular kind of reciprocity was intended to procure a market for "another bushel of wheat and another barrel of pork." It is a breach in the walls which have been so long e ected around the home market. It was made necessary in order to quiet the discontent of the Republican farmers of the West, who, confronted with starvation, have become unpleasantly active.

When this change of base was resolved upon by the Administration, a provision to carry it into effect was sent to Congress, to be engrafted on the tariff bill. By this provision it was proposed to admit free of duty all products of any country in "the American hemisphere," whenever such country should admit our breadstuffs, provisions, and certain enumerated articles of manufacture on the same terms. But this was soon discovered to be rather too bold a display of the net in the sight of the birds. Too much prominence was given to locomotives, to steel rails, and to structural iron and steel. When the provision was incorporated in the bill, therefore, the specific language was changed, and it now reads, "agricultural and other products." Locomotives, steel rails, structural iron, and other articles of manufacture are concealed under the name of "other products."

This reciprocity with the southern countries is advanced for the benefit of our farmers, to open more markets for breadstuffs and provisions. If its advocates are sincere in wanting to find larger markets for agricultural products, why do they not move for reciprocity with Europe instead of with South America? Europe takes from us more than \$600,000,000 in agricultural products yearly, which is sixty times as much as the southern countries take. If reciprocity with South America would increase our exports 50 per cent.—and it probably would—it would open a market for \$5,000,000 more of farm products, and similar

results, following from reciprocity with Europe, would increase our exports of farm products by \$300,000,000. Now, if the farmer is the person to be benefited, we must look eastward, not southward, for markets. The best markets for farm products are not to be found among agricultural, but among manufacturing, mining, and mercantile communities. A nation of farmers offers the best market to manufacturers, and it is for that reason that reciprocity with the agricultural countries of the South is so earnestly sought. The "other products" will get the benefits, and the farmers, as usual, will receive all the compliments of the season. We are able now to produce an annual surplus of agricultural products, valued at \$1,000,000,000, but we could not find a market for it in the countries of the western hemisphere if we should have full reciprocity with them all. It is not to the 50,000,000 shepherds and farmers to the south of us, but to the 300,000,000 shopkeepers to the east of us, that we must look to consume our surplus farm products. While the Administration is pressing for free trade with the South, it is pressing equally hard for no trade at all with the East. Fifty millions of farmers south of us, keeping up a protective tariff against all other countries, and letting in our manufactures free, would open markets for the consumption of many millions of our manufactures, and would add millions to the fortunes of the makers of locomotives. steel rails, and structural iron; but the benefits to the American farmer would not be perceptible.

If our neighbors to the south of us could be induced to keep up their tariffs against the manufactures of all other people and to admit ours free, our manufacturers would get the benefit of their protective duties and would plunder their people as mercilessly as our own are now plundered. The proposition for reciprocal free trade between them and us is a proposition to extend the protective system of our country over theirs. It is a proposition to them to give up the revenues that they raise by duties on imports, and to permit our manufacturers to collect such revenues for their own private benefit. Mr. Blaine, from the beginning of the agitation, had this object in view; and when his party friends hesitated to accept the new departure, he was compelled to tell them that it was not free trade at all, but protection, whose area

he was extending and whose hold he was strengthening. The cry, "Home markets for home products," has been abandoned by protectionists, and they are now demanding foreign markets for home products; but they refuse the home market to those foreign products that our people want.

Our best markets will be found among people who want agricultural products and who can give us what we want in exchange for them. Of all our exports, 75 per cent. are agricultural products, and the proportion has been as large as this through our whole history. Our foreign trade must depend upon the markets of those who do not, and not upon the markets of those who do, produce these articles at home in sufficient quantities to satisfy their own wants. We should enlarge, as far as we can, all markets for all products, and not lock up our agricultural products while throwing wide the gates for the export of manufactures. Moreover, in all things we should deal frankly with the people. We should not call a steel rail a bushel of wheat, or a locomotive a barrel of pork. The markets of the South would be very valuable to our manufacturers, and we ought to do all we can to secure them; but we should not secure them for the benefit of monopolies, but for the benefit of all our people. The right way to secure them is to produce our goods at less cost and to carry them and offer them for sale. We can produce them at less cost by removing all taxes from the materials that are used in making them. This policy would open the foreign market for our goods and enlarge the domestic market; for our best market is the home market, and it is a good or a bad market just in proportion to the amount and value of the surplus that we export. Our prosperity depends five times as much upon our exports of agricultural products as upon our exports of manufactured products, and the benefit to the farmer of free trade with the southern countries would be practically nothing. It is the interest of the protected manufacturer that points southward. The interest of the unprotected farmer points eastward. We must open wider the markets of the East for our farm products, or our farmers will sound a still greater depth of distress. The Administration asks that the markets of the manufacturer shall be expanded, but that the markets of the farmer shall be contracted. Wise statesmanship asks

that all markets be enlarged, and that every obstruction to trade be removed at every point of the compass; that no burden, except taxation for the support of government, shall be imposed on any article; and that, when it is imposed for revenue, it shall be placed on such articles and at such rates as will, with revenues from other sources, be sufficient to support an honest and economical administration of government with the least possible disturbance of private business.

If reciprocity with one country is good, reciprocity with another country also is good; and there can be no sound reason for enlarging our trade with the countries south of us that does not apply with greater force to the country north of us. Our northern neighbors number only five millions, and those south of us number fifty millions; yet we export to the five millions almost as much as we do to the fifty millions, and if all restrictions on trade between Canada and the United States were removed, we should almost double our trade in one year. The Canadians stand on the same plane of civilization that we do; they speak the same language, have the same history, and possess almost the same political institutions. In the productiveness of their labor they are almost our equals, and they are very far ahead of our southern neighbors. They can easily produce \$100,000,000 worth of surplus products which we want, and for which they would take with profit an equal value of our surplus products. Why, then, should we not have reciprocity with Canada? All trade is carried on for profit, and there is ten times as much profit in a trade of \$100,000,000 as in one of \$10,000,000. Canada takes from us more than \$15,000,000 worth of breadstuffs and provisions annually, while the southern countries take less than \$10,000,000. Why not open negotiations northward for "another bushel of wheat and another barrel of pork"?

But after all our efforts to secure reciprocity with the people of the western hemisphere shall have been crowned with the fullest measure of success, we shall have advanced but little from our present position. Our exports of agricultural products are worth more than \$600,000,000, and ought to be worth \$1,000,000,000. To find markets large enough to consume our surplus, we must look to the crowded populations of the eastern hemi-

sphere. We should direct our negotiations toward the governments of England, France, Germany, Belgium, Austria, Italy, and the other countries of Europe. We should lower our barriers against trade and then urge them to lower theirs. A reduction of our duties on foreign goods to 25 per cent. would double our trade in both imports and exports, and at the same time would bring to the treasury all the revenue the government would require. But instead of lessening duties so that our people might buy cheaper foreign goods and might pay for them with more bushels of wheat and more barrels of pork, Congress, backed by the Administration, has raised the duties to check imports and thus to make it impossible to enlarge our exports of agricultural products. All our industrial prosperity is based on the prosperity of our agriculture. By utilizing all the improvements in labor-saving machinery adapted to the farm, we are constantly increasing our surplus. What shall we do with our surplus breadstuffs, provisions, and cotton? Free trade with all the Americas and with the adjacent islands cannot consume a tenth of them. Two plans have been proposed by American statesmen to find a market for their consumption: one is to export them and to take in exchange the surplus of other nations, which these nations are anxious to give and which our people are anxious to take; the other is to keep the surplus at home and to import people enough from other countries to consume it.

The Finance Committee of the Senate in 1888, in its report on the tariff bill, showed that its members were expert scholars of our home-consumption philosophy. They assured the wheatgrowers of the West that the production of wheat for exportation is unprofitable; that we cannot produce it in competition with India, South America, Australia, and British North America; that they must look to "an enlargement of the certain and remunerative home market"; and that this enlarged home market can be had only "by increasing the number of people engaged in other than agricultural pursuits." What a stupendous stroke of statecraft! It fairly blinds with the brilliancy of its conception. If we look to our annual reports on foreign commerce, we shall see that we are exporting wheat at a lower price than any other country on earth. We sell it more cheaply

because we produce it more cheaply, and competition presses the market price down constantly toward the cost of production. The cost of producing a bushel of wheat in this country does not exceed forty cents. There is scarcely any competing country where the cost is not twice as much, if consular reports are to be credited.

But if, instead of exporting our wheat, we import people enough to consume it here, this fascinating problem is presented: How many people will it take to consume our surplus wheat? We grow now 500,000,000 bushels per annum. Five bushels per head will supply our home consumption; 320,000,000 bushels will amply satisfy that demand. This will leave a surplus of 180,000,000 bushels. We must import people enough to consume this, at five bushels per head. That will require the importation at once of 36,000,000 people! It is no argument, of course, that 36,000,000 people have not immigrated to this country in the last three hundred years. There has been no emergency heretofore requiring such an influx of population. That emergency is now come. We must have them, and, as Senator Aldrich says in his report, they must be people who are to be engaged "in other than agricultural pursuits." It was perfectly evident to his mind that if farmers were imported they would make the surplus larger instead of consuming it. Our census shows that one third of our people are engaged in gainful occupations, "other than agricultural pursuits," and therefore probably one third of those imported will be engaged in such occupations. Twelve millions of them must, therefore, be laborers in manufactures, mining, transportation, and indoor employments. More than one third of the twelve million must be engaged in manufactures. Our four millions of operatives make \$7,000,-000,000 worth of products. Four millions more will bring the total up to \$14,000,000,000. We can consume only \$7,000,000,-000 worth, and the immigrants would consume only about \$2,-000,000,000 worth. What are we to do with the rest? We cannot export it, because the tariff on raw materials shuts it out of the foreign market. Finding no market, either foreign or domestic, the production must stop; the immigrants must starve and the wheat-growers must go without a market. Their surplus loses its value. They stop buying goods; and manufactures, mining, and transportation are stricken with paralysis.

How will this principle work when applied to cotton? Our crop is 3,500,000,000 pounds. We consume at home, in round numbers, 1,000,000,000 pounds, and export 2,500,000,000 pounds. Our consumption is 18 pounds per head; the English consume nine pounds per head; the people on the continent of Europe about five pounds per head. To consume our 2,500,000,000 pounds of surplus would take the people of England, Scotland, Wales, and Ireland, all the people on the continent of Europe, all North Africa, and more than a tenth of Asia. And all this immense movement of population is to take place at once. The surplus is here and must be consumed, and as Mahomet refuses to go to the mountain, the mountain must come to Mahomet. In order to see and comprehend the beauty and beneficence of this scheme, it must be borne in mind that not one of the vast industrial army is to be a farmer!

Such are the absurdities of arguments that are made to circumvent the laws of nature. The law of development demands that we trade with all parts of the world, and that our trade keep pace with population and production. Production is outstripping consumption in all branches of our national industry. We must export our surplus and receive its value in the surplus of others, or it must rot on our hands and bring us no value. To emancipate the people is the duty of American statesmen. Unfortunately for the country, Congress is riveting their fetters more closely. Instead of making laws to deprive the people of the right of representation, our law-makers should busy themselves in removing all commercial obstructions, and should enable us to cover the oceans with fleets of merchantmen, carrying rich cargoes from the granaries and workshops of American laborers, and exchanging them in all the ports of the world.

ROGER Q. MILLS.

## SPAIN A DEMOCRATIC NATION.

FEW nations in the world are so democratic in their history as the Spanish nation is; but at the beginning of this century, the century of creative revolutions, none was so oppressed, not even the recently-dismembered Poland. Excepting the Basque Mountains, whose peaks and passes stopped both foreign invader and domestic tyrant so effectively that their inhabitants could continue under republican institutions, the nation had been reduced to such a state of weakness that kings, come from abroad through the accident of inheritance, could dispose of its territory and its laws as the ancient despots of the Asiatic continent disposed of their lands and their subjects. The people who had founded the Pyrenean democracies, so steeled by liberty that they were able to defy the Roman Cæsars and the Germanic Carlovingians; the people whose almost prehistoric municipalities are as firm to-day as the granite foundations of their native land; the people who possessed the Cortes of Castile and Navarre, the parliaments of Aragon, Catalonia, and Valencia; the people who dictated the Charters of Leon and the Aragonese customs and traditions before the British barons imposed Magna Charta on John Lackland—the Spanish people, within whose bosom the national soul was condensing, like the vapors of the air in an ocean storm, became so enfeebled as to allow the wizard Charles II. and the imbecile Charles IV. to bequeath or to grant to the conqueror and the foreigner, as if it were a private landed estate, the nation created by the sacrifice of so many martyrs.

Our own generation has seen a king like Ferdinand VII., comparable only to Nero and Caligula, and stained by all sorts of crimes; the clergy holding the national wealth, the greater part of which consisted of inalienable estates and uncultivated tracts of land surrounding churches and monasteries; generals like the Frenchman who was wont to hang a dozen patriots in the morn-

ing whenever he felt so inclined, and who danced the Castilian dance in the sunshine while his victims writhed in horrible agony; dungeons so filthy that their prisoners chose a voluntary death in preference to life in such hells; hunting parties organized to shoot Liberals like wild beasts at the road crossings and on the streets; the terrors of ancient Cæsarism added to the terrors of religious war; spies, with ears ever attentive, following the citizens like their shadows; executioners at the doors, threatening all the members of a family, even innocent babes, that the new generation of patriots might die in the cradle; honorable women, the wives or mothers of "innovators," led through the streets on asses, to the sound of the drum, as if they were prostitutes, and even sent to the scaffold and decapitated for having embroidered banners of liberty for good men; confiscation of property, banishment, the extermination of a whole party in short, whatever has stained the annals of humanity or tormented a people in the chains and racks of unbridled absolutism.

As the present generation came into the world amid such horrors, it befits us to take them into account. But we have been completely transformed; from an enslaved people we have become a free people. And it is natural that public opinion, seeing so profound a change, should investigate its causes, not only for the enlightenment of the intellect, but as an example in life. We explain with great difficulty events that we have witnessed, and, above all, those in which we have been actors. In order to observe clearly any period of history we must recede a little, so that it may stand out in perspective.

According to a well-known hypothesis as to the formation of the universe, the coldest and most inert stone was once an impalpable gas. So, in the formation of human societies, we see successive condensations of ideas. Nothing is so impalpable, nothing so ethereal as the idea, and yet nothing carries within itself so much life. A series of progressive institutions cannot exist unless it has been preceded by a series of progressive ideas, just as the condensed nuclei of worlds and of suns would not have existed if a diffuse, ethereal, radiant matter had not first existed in unfathomable immensity.

We can thus say clearly that, thanks to the power of an

idea, Spain is a true democracy, and a free and progressive democracy, at the moment in which these lines are written; for, though we see in its bosom two such historical and privileged institutions as an hereditary monarchy and a state church, their influence, compared with what it formerly was, is hardly perceptible in the luminous inundation of new ideas. people that has a written constitution by which it can always preserve its sovereignty, its liberty of thought and belief, freedom of the press, a sacred and inviolable home for every citizen, a popular jury system, and universal suffrage, can well be called with pride a true democracy, notwithstanding the fact that some irresistible fate imposes upon it a few contradictions arising from the laws of nature and of history. We shall ultimately overcome these contradictions by the strength of our will and the nobility of our ideal, two forces that cannot fail to be irresistible, though their development may be gradual.

But what are the lines followed by this ideal? How does it pass from the mind to life? How is it condensed into social forms and crystallized into institutions? We know external phenomena much better than internal ones. Those psychological objects that are nearest to us escape our investigations on account of their very proximity to the faculties which study and analyze them. It seems as if they were inflamed and dissipated by so much light. Through the solar spectrum we know of the atoms in the star Sirius, but there is no instrument that can analyze the various shades of a subjective ideal. We know that storms lighten and fulminate by the shock of two contrary electricities, but we do not know that revolutions do something similar by the clash of two contradictory ideas. Every student knows to-day how the oxygen exhaled by plants serves for animal respiration, and how the carbonic acid exhaled by animals serves for vegetable respiration; but religions, as a general rule, do not know how philosophies have helped them, nor do philosophies realize how much they are indebted to religions. ellipses described by the heavenly bodies have been determined by mathematical calculation; but not even by means of probabilities shall we be able to guess the ellipses described by ideas on the firmament of our souls. How the rays of the sun extract

sweet vapors from the bitter sea; how these vapors ascend to the air and condense in drops; how these drops descend to the ground and soak it, thus fertilizing the seeds in the field, we are taught by physics; but we are not taught by psychology how spiritual thought follows an analogous path from the abstract and theoretic to the concrete and real. The logical phases of the ideal, however, are so knit together that their historical results follow one another in unbroken sequence.

We speak of the French revolution, of the Spanish revolution, and of the American revolution, as if they were isolated and sudden movements, like the earthquake which suddenly terrifies a region and buries in an instant its unwarned inhabitants. But every revolution is a series of revolutions. Observe the genealogical tree of revolutionary ideas. First we had a revolution in time—we call it the Renaissance—in which history was rounded by the reappearance of the Hellenic world, long plunged in oblivion; after this there was a revolution in space, caused by the geographical discoveries of the Portuguese and Spaniards; after these revolutions in time and space came a revolution in feeling, through the new æsthetics that cut the stones of Santa Maria dei Fiori, and carved the doors of the baptistery of Florence, and raised the dome of Saint Peter's in Rome, and gave splendor to the halls of the Vatican and the Sixtine Chapel with the figures created by Raphael and Buonarotti; after this revolution in æsthetics, came a revolution in the domain of conscience through Luther; after this, a revolution in the understanding, through philosophy personified in Bacon and Descartes; then one in common sense through the Encyclopædists, and finally one in the popular will through the Conventions. A revolution, therefore, which at first sight seems to have sprung up singly and suddenly, may prove to be a corollary of all preceding revolutions.

Royalist Spain began to be changed into democratic Spain during that half century of universal revolution which began with the advent of Louis XVI. to the throne of France, and which ended with the calamitous Bourbon restoration. It is true that the Spanish nation, absorbed during three hundred years in the work of christianizing the new world, had remained behind on the way of progress in the old world. Our country, engrossed

in this important work, from which her star, whether for good or ill, had decreed that no other occupation should divert her, opposed with all her might the progress of the reformed churches, the canons of the new international law promulgated in the peace of Westphalia, and even the French revolution; because she was obliged to have the monarchical and the Catholic principles to serve as nuclei for the governments she was founding all over the globe, and as guides or beacons to lead her emissaries and representatives over seas never before plowed by European keels. Stationed as we were in the West and constrained to christianize the new world, the fate befell us that befell ancient Rome as soon as her conquests transcended the limits of Europe —we had to sacrifice, as a tribute to our discoveries, the blood of our veins and the liberty of our spirit. Over the virgin forests on the unexplored shores of the Mississippi and the Amazon, passing through dangerous straits in sight of the Southern Cross, multiplying, by continual discovery, continents and seas on our planet and suns and constellations in the heavens, that innumerable band of mariners, soldiers, and missionaries needed two moral guides in order not to be led astray in their Titanic efforts; and these were the monarchy and the church.

Thus, somewhat separated from the intellectual movement which was transforming ancient religion into modern philosophy, and from the political movement which was undermining the absolute régime and replacing it by the democratic, we came, half a century later than our French neighbors, to those revolutionary eruptions whose heat changed the old absolute states into parliamentary and constitutional nations. Far from wondering at the delay of Spain, as some superficial minds are wont to do, we ought to marvel at the promptness with which we embraced the modern spirit, swallowed up as we still were by the results of the colossal civilizing work that had been initiated and carried out under the guidance of the old principles. Therefore, the hatred manifested by all the Huguenot writers from Guizot to Michelet toward the work of Spain, does not seem to me to be just, since in such a work the two principal and irresistible factors were space and time; that is, our peculiar geographical position and our historic traditions. But Spain, which preceded many nations in other epochs of universal life, which was the first to impose the culture of the Latin empire on the barbarians of the North, which took the lead in transmitting the laie sciences of the middle ages to convents and other theocratic institutions, in organizing the municipality, and in giving the people access to the Cortes, which possessed an encyclopædia of all human knowledge as early as the thirteenth century, when other nations were a prey to superstition—this land had to remain behind when, in the sixteenth century, the modern age began, for the reason that her own greatness had enjoined on her a survival of historic institutions which were incompatible with the general progress. The writer cannot but bless this delay. Thanks to it, he has been enabled to join his name forever to the triumph of these three progressive principles: full liberty of conscience and of thought, the abolition of slavery, and universal suffrage.

Spanish democracy is the outcome of two similar revolutions in the present century—that which the infamous war of Bonaparte against our independence brought about in the year 1808, and that of 1868, which completed and crowned the first. The French Encyclopædists had already entered Spain, founding, by the natural radiation of their ideas, a school of thinkers which propagated those ideas and a school of great statesmen which applied and practiced them. Thus, the Spanish revolution resembled the French in having a long intellectual preparation and in having been begun by books and served by governments. When, in the middle ages, the bloody strife began, there was an unavoidable necessity of combating the armies of feudalism and those of theocracy. In order to oppose the first, kings devised the standing army, which they put entirely in their own control. In order to fight the armies of theocracy, these same kings obtained, more through force than through persuasion, the total suppression of the Knights Templars. Without intending it or suspecting it, they thus paved the way for the religious revolution.

Something similar to this happened in the last century. The kings were desirous of making their civil power absolute, but saw two obstacles—those very political organizations that they had instituted as councils, and the Jesuits whom they had revered during the religious revolution. Thus, the first thing they at-

tempted to do was to absorb the encyclopædic ideas and to personify them. From this personification came the philosopherkings. And these philosopher-kings, completely putting aside their old advisers, gave the direction of their states to prime ministers, who were almost absolute, or, at least, partakers of the absolute royal power. The names of Pombal, of Choiseul, of Aranda will bear witness to the truth of this; and those of Charles III. of Spain, of Catherine II. of Russia, of Frederick II. of Prussia, of Leopold of Tuscany, and of Joseph II. of Austria, will confirm what I have just said concerning the philosopherkings and their revolutionary influence, especially among Catholic nations. The permanent army of the Catholic power, the order of the Jesuits, fell by the decrees of such kings. And these pillars of the old intellectual régime once broken, the old political régime fell to the ground with them. Thus, long before the revolution was an established fact, the very power that was clearing the way for it began to be attacked. In Prussia attacks were made everywhere on the great, but philosophical and revolutionary, King Frederick. The Pope saw such adverse signs in this upper-class revolution, that he told Joseph of Austria that kings would soon be guillotined by the men they were emancipating. In Spain, Charles III. appears as the Constantine of the Encyclopædists and the Julian of the Jesuits. His orders of expulsion recall the worst acts of the Roman proscriptions during the terrible times of the triumvirate. And, not satisfied with this, he applied to civil laws and institutions as many principles as he could of the fashionable philosophy. But his royal orders, his implacable hatred of Jesuitism, his whole political system, demonstrated the dependence of the old absolute régime on the old religious régime. great struggle between the jurists and the Jesuits—the former being desirous that the social supremacy should belong to the kings, and the latter, that it should belong to the popes—terminated in favor of the former. Aided by the active Encyclopædists, Charles III. banished the Jesuits. Then the people began to attack the kings—timidly at first, in riots and mutinies brought about by trifling causes; more resolutely afterward, disrespect turning into insult and outrage. The ancient monarchical power

had disorganized itself by its acceptance of the philosophical ideas, and had sown unconsciously the seed of the Spanish revolution.

A most grave event was to crystallize all these ideas into multiple institutions. That event was our war of independence. We were combating the invading foreigner and revindicating the sovereignty of the people. In opposing Napoleon the Great, who threatened with his legions the existence of Spain, we reestablished, not only the independent existence of our country, but liberty and law as well. From time immemorial, democracies have developed in periods of foreign invasion. Just as all Christian churches have a Te Deum, in which they praise God and his providence, so all free nations have a Marseillaise in which we find, mixed with lyric strains in praise of liberty, a cry of horror of the foreigner. Our fight with Bonaparte for independence can hardly be equaled in the future. The most depressed of the nations of that time, without treasure, without an army or a navy; sold and betrayed by her kings; her doors wide open to the invader, in whom she believed she would find a brother, but in whom she found only an enemy; her fortresses occupied by treason and perfidy; her capitol held by a garrison of invaders; confronted by the greatest captain the ages had ever known, and having nothing with which to oppose him but fragile houses, naked breasts, women's curses, pikes cut from trees, flames from the hearth, stones from the roads, and what was left of a decimated population—Spain nevertheless succeeded in terrifying Murat at Madrid, in driving back Moncey from Valencia, in defeating Dupont at Bailen, in disarming Lefebvre at Balmaseda, in disconcerting Napoleon himself in Chamartin, in stopping Ney at San Payo, in expelling Soult from Galicia, in compelling Massena to leave Salamanca, in eclipsing the marshals called by Europe the planets of the sun of battles, in sustaining sieges like those of Saragossa and Gerona, in holding mountain passes resembling that of Thermopylæ, in improving armed corps like those raised by Mina and Merina, which would have astonished Leonidas, in supplementing the most scientific tactics by a popular warfare whose successes were incomprehensible to the very men who employed it, because they were due to sudden inspirations of genius. Seeing all this, we believe that there is nothing that the will of a people cannot accomplish when it resolves to sacrifice everything for liberty and native land.

By the side of these wonderful military deeds, we saw a moral spectacle that can never be sufficiently admired—the spectacle of the sovereign Cortes of Cadiz assembled by the impersonal call of the nation in the midst of pestilence and invasion, declaring the modern principle of national sovereignty and adopting a constitution so democratic that it was afterward invoked by all liberals in their efforts for emancipation, from the revolutionists of Genoa and Palermo to the patriots of Greece.

But the revolution that gave us the immortal Code of 1812 was followed by the reaction of 1814. The same infamous King Ferdinand VII., whose diadem the Cortes kept in its possession to save it from the dishonorable cession made by him at Bayonne and also from the Napoleonic invasion, which he himself had countenanced, violently closed the Cortes, and persecuted the immortal founders of our liberty like wild beasts. The stern law of reaction was fulfilled in Spain with horrible fidelity. As the heavenly bodies pass from aphelion to perihelion, as the seas ebb and flow, as the seasons turn from fruitful autumn to desolate winter, ideas converted into institutions pass from revolution to reaction in recurring phases that undoubtedly obey objective laws. But reactionary ideas pass, while progressive ideas persist. After the reaction of the year 1814 came the revolution of 1820. The vitality of the progressive principle was never before shown as it was then. An army that six years before had helped the crowned executioner, threw from its bayonets the spark of a redeeming revolution, and this spark did not stop in Spain; it galvanized Greece, moved Piedmont and Sicily, and even liberalized Portugal.

But the revolutionary idea was then in its state of diffusion, brightly shining and radiating; it had not reached the less brilliant but more lasting and solid period of condensation and consolidation. After three years of democratic government we receded once more, owing to the inexperience of the Liberals, the perversity of the reactionists, and the deadly influence of the despots, who sent a hundred thousand soldiers of the French

Bourbons to restore absolutism in Spain. The horrors of this reactionary period, which began in 1823 and lasted till 1832, exceeded the horrors of 1814. The greater part of the Liberals was horribly oppressed; another part was banished; a third part was completely exterminated. The generals who had been the most illustrious figures in our war of independence were mockingly led on carts and in cages, like the animals of a menagerie, and then killed by Royalist mobs. And still, O changes of fortune! the dying Ferdinand VII. repeated, in reference to the Liberals, the words attributed by tradition to the apostate emperor in regard to the Christians: "Thou hast conquered, Galilean." And, indeed, those terrible reactionists, having grown strong under the safeguard of reaction, rose against Ferdinand VII., influenced by his elder brother Don Carlos, to whom the ruling despotism seemed not sufficiently theocratic, that is to say, not sufficiently reactionary. At the same time, the tyrant married, in his old age, a princess of Naples, who boasted of liberal ideas, and the fruit of their union was the future Queen Isabella, to whose rights as a daughter her uncle Don Carlos opposed the ancient Salic Law, which excluded women from the throne. Hence arose the war that we ought to call our war of succession, but which we have named the Seven Years' War, because it lasted from the beginning of 1833 to the beginning of 1840.

In the name of a child queen, and almost in the absence of monarchy, we were able for a whole decade to exercise the government of the nation by the nation, which had been begun by the Constitution of Cadiz, but had been subjected to long eclipses, as we have already seen. The regency, which governed in the name of Isabella II., passed from Christina, the queen mother, to Espartero, a popular general, and a constitution by royal grant, in which royal power predominated, gave place to a constitution discussed and sanctioned by the Cortes, in which parliamentary power was predominant. The promulgation of a very liberal code by the government, and the establishment among the people of what we might call a new social order, produced a most radical change. The abolition of secular vested rights, and of the mortmain of ecclesiastical patrimony, gave to the emancipated classes the enjoyment of property; the

principles of the fundamental code and the exercise of legislative power by both chambers insured to the nation its full sovereignty. After her long minority came the true reign of Isabella II. The Cortes allowed her a few of the years during which she should still have been under regency, and she entered upon the plenitude of her authority in 1844. But she acted toward the Liberals as her father had acted toward the patriots. The latter had defended Ferdinand VII. against Napoleon; but this wicked tyrant exterminated them with more fury and bitterness than the conqueror would have done. The former defended Isabella II. against the partisans of Don Carlos during seven years of fierce civil war; but the queen favored the principles and the partisans of Don Carlos as much as her own traditions and the spirit of her time permitted. The reign of Isabella II. proved to be a dark night of reaction occasionally illumined by the lightnings of revolution.

At last the law that reactionary ideas are always transitory, while revolutionary ideas are always permanent, was fully exemplified. The generation to which I belong turned in anger against the hypocritical absolutism of Isabella II., and resolved to end it. In this undertaking we certainly did not suffer as long as our fathers had suffered under Ferdinand VII., but at times we suffered as intensely. We conspired in the long preparatory period of the revolution, and we fought in the outbreak itself, as the martyr generations had conspired and fought in their time. Many of our efforts were dashed to pieces against unconquerable fate. As a consequence of such a purpose, and of the partial failures that followed it, we went into exile like souls in purgatory, and saw our names inscribed on death-warrants. Spain fell once more into absolutism. But this reaction served only, in the long run, to demolish the throne of Isabella II. The intensity of reactionary violence finally up-rooted the monarchy, an institution that had lasted since the time of Augustus, the oldest of all our institutions except the municipalities, and much older than our church, which did not have full sway over our people till the seventh century of the Christian era.

In the midst of the revolution we cast forth the germs of new ideas, utterly heedless whether they fell upon the stony

ground where they could not bear fruit, or on the flood that might sweep them to the profound abyss without profit. God had granted the apostles of the Spanish revolution the same gift that he had bestowed on the apostles of the Cenaculum—the precious gift of tongues. In that great assembly of the revolution, all the members displayed upon their brows the flame of the ideal, and from their lips came forth a word as divine as the creative word the word of liberty. In order to sow so much and to put ourselves, in a short time of incessant creation, on a level with the foremost nations, we were forced to exhaust our spirit; and in order to implant all those ideals in our soil, we had to furrow it deeply. God alone could create the universe without pain, by the mere breath of his lips, by the mere echo of his word. A creative generation like ours must be an unhappy generation. Among the various forms of government that might be deduced from the principle of national sovereignty, we looked for anchors for our liberties, and lo! we could not find them. The democratic monarchy and the radical republic failed in this work of carrying out the new ideas, and another reaction came. On December 30, 1874, we saw a dynasty similar to the one that we had expelled on September 30, 1868, restored in the person of Alfonso XII. As soon as the dynasty returned to the throne, I went back to exile; but this time it was a voluntary exile.

Then I withdrew within myself and resolved to restore all we had lost by that reaction. To do this, I realized that it was necessary to change our methods. During the revolution, we had acquired a revolutionary temperament; it behooved us to throw off that temperament and to accommodate ourselves to a slower but surer method—that of evolution. Revolutions are like wars, after all; and in wars we can forge heroic warriors, but we cannot educate good citizens endowed with that juridic conscience and that respect for the law that the moderate and legal exercise of liberty demands. The most progressive thoughts gleaned by modern science had been sowed in the furrows opened by revolutionary force; but an extreme reaction had hidden them under its deep frost, and it was necessary not only to wait for the thaw, but to get ready to look carefully after their roots, their stems, their flowers, and their fruits, convinced that

no individual human strength could hasten the time of their inward development. A habit contracted in the times of our conspiracies and our combats had inclined us to prefer the conquest of the state through revolutionary violence to the conquest of public opinion through a continued and pacific apostolate. Society has its physiology. Organs that are not exercised become atrophied and disappear. A people that needs self-government, but unlearns or forgets the pacific exercise of legal forms, finally contracts a sickly temperament under which it passes from revolution to reaction, and from plebeian dictators to absolute kings, with sudden changes of internal temperature, fatal to its life. The first day of the restoration, I saw that it was perfectly possible to restore all the democratic principles and the government of the nation by the nation, on condition that we, looking about us with true circumspection, should agree to grant to the conservative parties all that which no human force can oppose, and which must be recognized as necessary to a certain social period.

Thus, I declared that in politics I placed law and order above all else. And having said this, I added that while bound by restricted laws, I intended to work for liberal laws; within these laws, for other laws still more liberal; and within these more liberal laws, for the most liberal, without ever deviating from strict and necessary legality. I acknowledged that laws should be improved, but in a lawful manner. I said that in order to define ourselves, we ought to limit ourselves, never going beyond what was possible and demanded by our great social aspirations. Provided each Spanish citizen could be as free within his home, and in the exercise of his individual rights, as the citizen of the United States, and that all collectively could govern themselves through their own chosen representatives, we ought not to be shocked by the contradictions left in the state, nor obstinately to insist, as of old, on having all institutions logically systematized and made to correspond to the ideal in a single minute; inasmuch as contradictions analogous to those we lament exist in countries as free as England.

With these practical ideas, the motors of most tenacious purposes, I entered the first parliament of the restoration, chosen

by the electors of a city traditionally democratic-the noble Barcelona. I was alone in Congress. Of all the historic Republicans, I was the only one who had reached so high a place. the first session in which I rose to speak within that hostile body, the flight of an insect could have been heard in the place, full of reactionary representatives, among whom some bewailed the old Catholic unity broken by my efforts, others their slaves, emancipated by my government, and still others the monarchical sentiment, rooted out of the country by laws and institutions to which I had given my voice and vote; and none of whom was without some wound in his interest or in his faith. But noticing how those enemies, in spite of their hatred, listened with attention to what I said, I told them how I, shipwrecked by civil discord, though finding unfriendly shores whithersoever I turned my eyes, accused no one in my misfortune, but on the contrary, appealing to all by my teaching and my example, proposed to restore, without violence, the democratic principles that seemed crushed under the overwhelming weight of the restoration.

Nearly fifteen years have passed since I uttered such words, and what I then promised has been fulfilled with the greatest exactitude and fidelity by the methods to which I have alluded. When we compare what our Spain was under the above-mentioned Congress with what she is to-day, the realization of so much practical progress and the harvest of so many democratic ideas seem like a dream. A cruel proscription was then weighing upon the Republican professors who had been deposed during the revival of religious intolerance. These professors occupy their chairs in the universities to-day, because the liberty of thought and faith has been recognized, in accordance with the dictates of reason and of conscience. Trials were then held secretly, as in inquisitorial times; justice now seeks the light, giving greater security to the citizen. We then depended on tribunals which themselves were dependent upon the government; popular jury trials to-day give back to the people the foremost of all sovereign attributes—the administration of justice. Our party, called factious by the public power, and as such persecuted, was then declared illegal; to-day, Republican doctrines can be preached in the light of day, and will be carried out,

when the nation shall hold it fit, within the bounds of legality. Meetings then could be held only through the tolerance of the government; now we assemble because our right to do so is acknowledged by the law. The Minister of the Interior then had the sole power of granting permits to publish newspapers, and he subjected journals to capricious suspensions and suppressions. To-day, any Spanish citizen can found a paper without making a deposit or giving the name of the responsible editor; and the excesses of the press are restrained by ordinary penal legislation and punished by public conscience and public opinion. The epithet "factious," applied to our party by the reactionists, naturally brought with it the prohibition of our organizing committees and of our open-air demonstrations. But, thanks to a law passed by the last Cortes, all committees, to whatsoever party they may belong, can now exist at their own pleasure in permanent activity, can institute chairs of political propagandism, and can hold debate upon all imaginable themes without danger of being molested, so long as they do not commit transgressions punishable under the code. Even the decree for the abolition of slavery met with restrictions in the subsequent institution of patronship. Among the glories which liberal congresses will present to the judgment of posterity, numerous and great as they are, the extirpation of patronship will stand out, for by means of it slavery was rooted out of our land.

The only thing wanted to complete all this marvelous evolution was to extend to all the privilege of voting, formerly enjoyed by a few. Universal suffrage, promulgated in June, 1889, makes Spain a complete democracy—a free and parliamentary democracy. In the exercise of all individual rights and in the ample field which our laws open to all ideas and aspirations, we may hope to see the crowning of such a work and the practical government of the people by the people. As we rest now by the wayside and withdraw into ourselves to examine our own consciences, as we contemplate the way over which we have come, seeing how much has been done and how little remains to be done, we feel satisfied with ourselves, and for the perfecting of our work we put our trust in the God of liberty.

EMILIO CASTELAR.

## SOUTH-WESTERN COMMERCE AND GULF HARBORS.

The deliberations of the recent Pan-American Congress at Washington, the interest developed in our sister republics of South America, their increased knowledge of our resources and their better understanding of our disposition toward them, the reciprocity agreements recently entered into with Brazil and Venezuela, the prospect of similar agreements with Mexico and with the states of Central and South America, and the construction of the Nicaragua Canal—all combine to direct attention just now to the harbors on the coast of the Gulf of Mexico.

From Cape Sable to Mexico is a line of coast more than 2,000 miles long, and on this entire coast the only harbors of importance are the following: On the Florida coast, Key West, Charlotte, Tampa, Appalachicola, and Pensacola; on the Alabama coast, Mobile; on the Mississippi coast, Biloxi; on the Texas coast, Sabine Pass, Galveston, Aransas Pass, and Brazos Santiago. Of the Florida harbors on the Gulf coast, Tampa seems to be attracting the most attention. In its improvement the western, the middle, and southern States have taken a profound interest, claiming that several millions of dollars may be saved to the people on goods from Cuba, Central America, South America, and Mexico, now brought by the way of New York and the Atlantic seaboard. Such goods now pass out of the Gulf of Mexico and the Caribbean Sea through the reefs of Florida, enter the Atlantic Ocean, and pass on by way of Cape Hatteras to New York, costing a burdensome extra insurance and a fearful annual loss of vessels and of perishable goods. It was asserted, in a hearing before the Senate Committee on Commerce, that \$265,000,000 worth of goods are carried yearly to and from the eastern seaboard over this dangerous route; that out of this amount \$165,000,000 are consumed, handled, and manufactured west of the eastern boundary of Ohio; and that the whole of this latter amount ought to enter this country at Tampa Bay, and

would do so if that harbor were properly improved. Much has already been accomplished there. The United States mail is now carried by way of Tampa to Cuba in 66 hours from New York, and in the same time from St. Louis and Chicago, from which cities the time formerly was 324 hours. The population of the city has increased, in five years, from 1,200 to 10,000 people.

A brief review of the methods and results of recent river and harbor improvements in other parts of the United States will help to an understanding of the work outlined and begun at the Gulf harbors, and to an appreciation of its importance; and first, as to internal commerce:

Statistics of our internal commerce have never been accurately collected, but it has been estimated that the domestic produce moved and exchanged in this country last year amounted in value to \$25,000,000,000. The annual river commerce of Cincinnati is valued at more than \$50,000,000. The tonnage that passes up and down the Detroit River annually is greater than that which enters the port of Liverpool. The number of vessels that enter and clear at Chicago exceeds, every year, by 7,000 the number of those that enter and clear at New York. The tonnage passing through the Sault Ste. Marie in 1890 exceeded that passing through the great Suez Canal by 1,000,000 tons. Our lake, river, and coastwise tonnage amounts to nearly 4,000,-000. The present marvelous cheapness of water transportation is of inestimable value to the people in enabling that transportation to compete with railroads and to regulate their charges. Naturally the demand for the improvement of the lake harbors, of connecting streams and canals, and of the immense watercourses of this country has increased in its importunity with the increase of this commerce; but the increasing appropriations in the river and harbor bills are not even vet one half as large as the amounts proposed by the engineer board.

The first general appropriation for rivers and harbors was made in 1823 and amounted to \$22,700. It reached \$8,500,000 in 1867, \$18,500,000 in 1883, and \$25,136,295 last year. This seems a vast sum of money, and yet there is not a great maritime nation in the world that does not expend more every year, in proportion to the number of its harbors and to the extent of its

seacoast, than we do. Our seacoast, reaching from St. John to the Rio Grande and from San Diego to Puget Sound, is more than 23,000 miles. England spends more than \$20,000,000 annually on a seacoast of about 1,300 miles. We have, also, more than 2,000 miles of navigable rivers from Pittsburg to the mouth of the Mississippi, and 2,500 from St. Louis to the headwaters of the Missouri; and these constitute but a very small fraction of the watercourses that are easily susceptible of adaptation to our internal commerce. The total number of works provided for in the river and harbor act approved September 19, 1890, is 435.

So sharp has been the freight competition within the last twenty years, that to enable the carrier by water to have even a small margin of profit, almost a complete revolution in the structure of vessels has been made necessary; so that while 25 years ago a depth for ordinary harbors of from 12 to 15 feet was ample, now depths from 25 to 30 feet are required. This necessity of greater depth alone would demand of Congress, if it should be at all responsive to the requirements of commerce, constant and largely-increased expenditures. Our people, then, ought not to expect hereafter any decrease in the amount of money called for by the river and harbor bills. I am aware that a clamor is raised against these bills now and then, but it inevitably subsides after careful and candid investigation. I have no hesitation in saying that no other appropriation bill brings to the citizens of the entire country more direct benefit.

The harbor at Brunswick, Georgia, affords a striking illustration of the benefits of governmental improvement. Over the shoal in front of the city there was, when the present project of improvement was adopted in 1880, a depth at low water of only nine feet. The work hitherto has been limited to the erection of a training wall and to dredging, but since the completion of the wall, in 1889, the dredged cut has maintained a navigable depth of 15 feet. The appropriations for this work, up to the present time, have amounted to \$162,000. In consequence of it, a remarkable increase in the commerce of the city of Brunswick has been developed. The population rose from 3,000 in 1880 to 12,000 in 1890. Taxable values increased, during the same

period, from \$1,300,000 to \$6,000,000. The trade in naval stores, begun there in 1875, amounted to \$1,000,000 in 1889. Lumber shipments increased during the same period from 37,000,000 feet to 100,000,000 feet. In 1884–85 the cotton shipments were 4,000 bales; in 1889–90 they were 200,000 bales.

Many similar illustrations might be given. There has, it is true, been extravagance in the expenditure of money on rivers and harbors, but this is incident to our manner of appropriation. In Europe, when it is determined to improve a river or a harbor, or to construct a canal, a plan is agreed on, an estimate is made, and all the money necessary is appropriated at once, to be expended as the necessities of the work require. Here, after the plans have been determined upon and complete estimates have been made, the appropriations are spasmodic and uncertain. Contracts can be entered into only to the extent of the amount actually appropriated. Not infrequently, as at Galveston, the expenditures of one year have been scattered by the winds, the waves, and the drifting sands, before the next appropriation has been made. I am satisfied that the cost of our improvements, for these reasons, has been from 25 to 50 per cent. greater than if we had adopted the custom prevailing in other maritime countries. The Senate Committee on Commerce, in the case of the last river and harbor bill, undertook to break away from the old methods. They selected four localities and added to the item of appropriation for each the following:

"Provided, that such contracts as may be desirable may be entered into by the Secretary of War for the completion of the existing project, or any part of the same, to be paid for as appropriations may from time to time be made by law."

The first of these localities is the outlet of Lake Superior at Sault Ste. Marie, where the estimated cost of the improvements is \$5,500,000. This outlet will soon be choked by the enormously-increasing volume of traffic; for the capacity of the present lock will be reached during this season, and four years at least will be required to complete the lock on whose foundation work is now in progress. The business of the single lock in the 234 days of navigation in 1889 was 7,500,000 tons; more than 1,000,000 tons in excess of the year 1888, and 500,000 tons more

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than the movement through the Suez Canal in the 365 days of the same year. Under the authority given him, the Secretary of War entered into contracts for the completion of the entire work at a cost 37 per cent. less than the old estimates. Similar authority to contract for the entire work was given for the improvement of the harbors at Baltimore, Galveston, and Philadelphia, and it is already apparent that the saving to the government will be from 20 to 40 per cent. Besides economy in expenditure under this method, there will be also economy of time, and the government will be no longer responsible for the waste and destruction caused by winds and waves. If the result of these experiments shall be as beneficial as I confidently expect them to be, a revolution in method will be accomplished. of great value to the country.

No more notable instance of the efficacy and benefit of river and harbor improvements can be given than the results that have been accomplished at the mouth of the Mississippi. The river enters the Gulf of Mexico by five separate passages, which were long blockaded by shallow and unstable bars at their outer entrances, or immediately in front of those entrances. The constant increase in the dimensions and draft of ocean vessels, and the general substitution of steam vessels, with greater carrying capacity and speed, for smaller sailing craft, together with the rapid development of the Mississippi valley, urgently demanded a fixed and reliable means of passage to the Gulf. From 1872 to 1877 nearly 500 vessels grounded, and were in many instances seriously damaged, while attempting to pass through the several passages of the Delta. Frequently scores of vessels, containing many million dollars' worth of merchandise, were detained for days, waiting for a rise of water or for a favorable wind.

In 1874, Capt. James B. Eads, of St. Louis, submitted to Congress a plan to open the mouth of the Mississippi River by constructing a system of jetties. This plan he described, in terse form, as follows:

"The improvement of the mouth of the Mississippi proposed by me consists in an artificial extension of the natural banks of one of the passes, from the point where they commence to widen and disappear in the Gulf, to the crest of the main bar, about five miles distant."

In 1875, after a thorough and careful investigation of the entire subject, Congress gave authority for the construction of jetties according to this scheme. As the work progressed the advantages and practicability of the project were almost daily more clearly demonstrated. The current of the river, concentrated by the jetties, gradually scoured a passage through the bar, and finally, on July 8, 1879, the desired depth and width of channel were secured. To-day, the largest ocean-going steamships pass in and out with absolute safety and ease. The shipments to all parts of the world from the port of New Orleans, situated about 100 miles above the head of the passes, have shown a steady increase, and have demonstrated beyond all possible question the substantial advantages secured to the agricultural, manufacturing, and commercial interests of the whole Mississippi valley. In addition to these commercial advantages, it has been shown by competent authorities that the volume of water passing through the jetties in times of flood and high water on the river is materially greater than the flow through the pass in its unimproved condition.

One of the most important improvements on the Texas coast is that at Sabine Pass. This pass is the outlet of Lake Sabine, which lies between Louisiana and Texas. The lake is about 15 miles long and eight miles wide, with an average depth of about seven feet. The pass from the lake to the Gulf is nearly seven miles long, by the channel, and its width varies from about one third of a mile to one mile and a half. On the west bank of the pass, more than four miles from the Gulf, lies the small village of Sabine Pass, at the terminus of the East Texas Railroad, a tributary to the Southern Pacific. Through the pass there is a channel, averaging about 500 feet wide and varying in depth from 17 to 30 feet. The bar at the mouth of the pass, unlike others on that coast, is mainly soft alluvial mud, extending to a depth of more than 30 feet below mean low-water level.

The object of the plan for the improvement of this harbor that was adopted in 1882 was to obtain a channel 20 feet deep through the bar. This was to be accomplished by constructing two brush and stone jetties extending from the shore across the bay, and by dredging between them if necessary, at an estimated

cost of \$3,000,000. Upon this project work was begun in 1883, and it has been continued from time to time, as appropriations have become available. These have thus far amounted to \$1,-100,000. The present length of the east jetty is 17,000 feet, of which the outer 450 feet consists of foundation work only. west jetty has been extended to 9,500 feet. The result has been to increase the mean low-water depth of the channel from less than seven feet to ten feet. If appropriations are no larger or no more frequent in future than they have been in the past, it will be twenty years before the work is finished, while, for the best results, it should be completed within three years. The execution of the project will be especially valuable in furnishing an outlet to the immense quantities of lumber which will be supplied by the pine forests of that region. The last census report on forestry states that the amount of pine timber in the parts of Texas and Louisiana north of Sabine Pass and tributary to it, is 106,974,-500,000 feet. This quantity is sufficient to load 697,830 vessels of 300 tons each, and these, placed stem to stern, would form a continuous line around the globe with 600 miles to spare. present product of pine lumber in the region directly tributary to Sabine Pass is 500,000,000 feet a year.

The attention of Congress has been directed for many years to the importance of securing adequate deep-water accommodations on the north-west coast of the Gulf of Mexico, for the products and general traffic of the States and Territories west of the Mississippi River. The corn of Kansas, the wheat of the Dakotas, and the mineral products of Colorado, Nevada, and California have, by reason of burdensome land-transportation charges, been subjected to a tax that has frequently prohibited their exportation. Finally, in 1888 and 1889, the interest felt on this subject throughout the West culminated in conventions held in Denver and Topeka, in which were represented the States of Iowa, Nebraska, Missouri, Kansas, California, Arkansas, and Texas, and the Territories of Wyoming, New Mexico, and Oklahoma. These bodies passed resolutions urgently demanding of Congress the establishment of a harbor at some point on the coast of Texas, with sufficient depth and area to accommodate ocean-going traffic. Congress, in March, 1889, provided for the appointment of a

board of three army engineer officers, to examine critically the north-west coast of the Gulf of Mexico, with a view to determining the most eligible location for the formation of a deep-water harbor that should accommodate the largest ocean vessels. This board, in the following December, submitted a report stating that Galveston is the most desirable location, and that the project for the improvement of its harbor is the most feasible.

The problem of securing such a harbor, here as elsewhere on the Texas coast, is an exceedingly difficult one. The tidal oscillation, which supplies the only available power for scouring out the channel across the bar, is unfortunately only about one foot in height. The shifting sands have proved their readiness to swallow up any structures which may be placed upon them, and the hungry teredo devours every piece of wood which is left to its mercy. Both nature and the railroads have given to Galveston important advantages. Its inner harbor is of inestimable value to the successful solution of this problem. Within the thirty-foot curve there are nearly 500 acres, and there are more than 1,300 acres where the depth is 24 feet. This inner bay is separated from the Gulf of Mexico by a low sand island, 27 miles long, and varying from one mile to two miles in width, on which Galveston city is situated, and by a spit 20 miles long, called Bolivar Peninsula. The main entrance to the bay is between the east end of Galveston Island and the west end of Bolivar Peninsula, and in its natural condition had a width of about 8,000 feet and a depth not exceeding 11 feet at mean low water. It is obstructed by an outer bar and by an inner bar.

The project for the improvement of this entrance, as finally revised by a board of engineers in 1886, provides for the construction of two jetties of stone and concrete, one on each side of the pass, extending from deep water in the bay to the thirty-foot contour line of the Gulf, and for such dredging as may be necessary to aid the tidal scour in maintaining a depth of 30 feet through the channel. The tidal oscillations being so slight, the main difficulty found was to obtain sufficient volume and velocity of tidal flow, by the assistance of artificial constructions, to establish and to maintain a navigable channel. Owing to the great area of the inner bay, the volume of water passing through

the gorge at each tide is very great, exceeding by about 30,000 cubic feet a second the entire low-water discharge of the Mississippi River. But there are times when the volume of discharge is enormously increased by southerly storms, which augment the depth of the bay five or six feet, and it was necessary to establish a width between the jetties, which, while sufficiently contracted to enable ordinary currents to scour out the passage, should be ample enough to permit this enormous body of water to escape without completely demolishing the structures. After a series of careful experiments, a width of 7,000 feet was determined upon, and has so far proved entirely satisfactory. The estimated cost of completing this work is \$6,200,000.

Other great advantages of this harbor are its accessibility to the region which will be tributary to it, and its railroad facilities. The distance from San Diego to Galveston by rail is 1,581 miles, 361 miles less than to New Orleans, while the expense of water transportation from either of the last-named places to Cedar Keys is substantially the same. This 1,581 miles is less than half the distance across the continent to New York. The distance from Denver to Galveston is 950 miles, while from the former city to New York the distance is 2,029 miles. The Galveston, Harrisburg, and San Antonio Railroad, running westerly from Galveston, connects with the Southern Pacific system, which extends from San Francisco to New Orleans. The Missouri, Kansas and Texas, the Houston and Texas Central, the International and Great Northern, the Denver, Texas and Fort Worth, and their connections. furnish at Galveston the most convenient outlet for the products of Nebraska, Iowa, Missouri, Kansas, Colorado, Utah, New Mexico, Arizona, and California, destined for the eastern States or for Europe. It is expected by the engineers that, with the rapid and continuous work rendered possible by the above-mentioned provision of the last river and harbor bill, the project will succeed. If these expectations shall be realized, Galveston has a great future before it; not only as an outlet for that vast region which has been alluded to, but also as the most convenient port for the great trade with the Central American and South American republics which recent negotiations and legislation are designed to develop.

Corpus Christi Pass is located at the south-western extremity of Corpus Christi Bay, 225 miles below Galveston, and affords entrance to the southernmost harbor on the Texas coast. It is about 20 miles south of Aransas Pass. The bay possesses deep water and ample anchorage area, but the pass is narrow, having less than seven feet of water over the bar at its mouth, and not more than five feet at its head in Corpus Christi Bay. These physical characteristics have prevented the government from undertaking to obtain deep water through the entrance. During the present session of Congress, however, a private corporation, organized under the laws of the State of Texas, has been authorized to construct, at its own expense, certain harbor works at Padre Island, a short distance south of Corpus Christi Pass. The United States expressly disclaims any responsibility for the obligations or liabilities of this company, and reserves the right, at its option, to purchase such works as may be constructed, for a price to be determined by a board of army engineers. The company, which is known as the Corpus Christi and Padre Island Harbor Company, intends to build an outside, deep-water harbor, to be secured, first, by the construction of an approach from the mainland, about five miles in length, to the outer shore of Padre Island; secondly, by a viaduct nearly a mile long to connect the island with the harbor; and thirdly, by harbor walls proper, embracing an area of 150 acres, or as much more as may be desired. The cost of these works is estimated at \$1,500,000. The harbor, when completed, will be a free harbor of refuge for the vessels of all nations, but the company is permitted to charge such reasonable rates of toll for wharfage as the Secretary of the Treasury shall approve.

About 170 miles south-west of Galveston is Aransas Pass. This is the entrance to Aransas Bay, which is connected by shoal water with several other bays, including that of Corpus Christi. These bays have a united area of 350 square miles. In its natural state the pass for many years moved bodily in a southerly direction at the rate of about 260 feet a year, and the depth of the channel over the bar varied from seven to nine feet. The object of the plan of improvement, adopted in 1879 and modified in 1887, is to fix the position of the pass by means of

revetment work on its southerly shore, and to provide, by means of jetties, a navigable channel at least 20 feet deep through the bar. The revetment has been constructed of stone in such a manner, it is believed, as to prevent the further movement of the pass. Work was performed on the south jetty as rapidly as the limited appropriations allowed, until 1885, when a depth of eleven feet at mean low water was obtained; but, on account of the shifting sands of the Texas coast and the destructive action of the teredo, the wood work of the jetty disappeared almost as fast as it was put in place, and operations upon this structure were abandoned by the government after an expenditure of half a million dollars. Congress, however, by act of May 12, 1890, granted to a corporation the right to improve the navigation of this pass, the privilege being revocable unless a depth of 20 feet of water over the bar shall be secured within five years.

It is impossible now to make reference to other noteworthy harbors of the Gulf, notably those of Pensacola and Mobile, which, owing to projects now in process of execution, are to become exceedingly important in the near future.

WILLIAM P. FRYE.

## CHANGES OF ORTHODOXY IN ENGLAND.

What looks like chance is often an important part of the machinery of evolution. We have a remarkable illustration of this fact in the drift of religious thought, especially in England and in the English Church. When we compare theological with philosophic thought, we are at once struck by the extraordinary difference between them. Philosophy is constantly progressing through the voluntary efforts of its votaries. Every great philosopher, every humble student, sets himself to correct, to develop, to carry further, the thoughts of those who have gone before him. In theology, on the contrary, there is but little voluntary movement, and that little is generally in a backward direction. Among the clergy, as a rule, there is no desire for advance. Retrogression is their ideal. To believe what St. Augustine, or Calvin, or Luther believed, to wear the same clothes and perform the same rites as obtained in the reign of Edward VI., to go back to some by-gone age and stop there—this for hundreds and thousands of clergymen is the summum bonum. But just as matter, in spite of its own inertia, is always moving, so there is really a progressive drift in religious thought; although the clergy, with but few exceptions, are doing their best to remain stationary. The drift of thought, chiefly unconscious and involuntary, which is taking place in the Church of England, I purpose now to investigate.

There is not one single doctrine or ceremony in regard to which the clergy are agreed. The views which they hold are divergent oftentimes to the point of contradiction. Some of the clergy, for instance, adopt the expiatory view of the atonement, and believe that Christ's vicarious suffering "satisfied the justice of God," and so saved us from hell. Others look upon this theory as no better than a "doctrine of devils." Some, again, think that the Saviour's connection with the Father was unique not only in degree but in kind, and they speak of his human exist-

ence as the incarnation. Others—one or two--speak of it merely as the incarnation, that is, the incarnation par excellence; for they hold that all men are incarnations more or less. As to the Trinity, some adopt the formula "three persons in one God" in the vulgar acceptation of those terms—in the sense, namely, of three individual gods in the Godhead. A few interpret "person" according to its original meaning of "character," and understand by the persons of the Trinity only different manifestations of one indivisible God. In regard to miracles, some acknowledge an indefinite number, including even the theosophical; some, though doubtful of theosophy, believe in the miraculous power of the saints; some restrict themselves to the miracles mentioned in the Bible; some draw the line at the New Testament; some believe only in the miraculous conception and physical resurrection of Christ; while some regard even these stories as after-growths, and are ready to subscribe to the famous dictum of Prof. Jowett, "Men will in time give up miracles as they have already given up witchcraft." With reference to prayer, some assert that we may ask for health, wealth, fine weather, and all the good things of this life, with a considerable likelihood of getting them, even at the cost of a violation of the laws of nature; others relegate prayer entirely to the spiritual sphere, and maintain that the only gifts we can receive in answer to it are faith, hope, "grace," and the like; while others tell us that even here the effect is subjective rather than objective—that we are made better, not by any direct action of the Deity, but simply by our own desire for improvement. As to the sacraments, some believe in "baptismal regeneration," and think that an infant is really "born again" when a few drops of water are sprinkled on it by a priest; while others look upon this dogma as a vain, not to say blasphemous, superstition. And regarding the eucharist, some are transubstantiationists, acknowledging the real physical presence of Christ in the consecrated elements of bread and wine; others, preferring Luther's idea of consubstantiation, believe that his spiritual presence goes along with the elements; and others adopt the Zwinglian view that the effect of the bread and wine is merely to stimulate the imagination of the communicants. As to future punishment, some declare that a large proportion of the race

are predestined to damnation, and that by no conceivable effort can the reprobate avert their doom; others say that salvation is provided for all men, and that they can be lost only by their own voluntary rejection of it; and others again assure us that there is no such thing as being lost, in the vulgar sense, and that hell is but a name for punishment, the purpose of which is in reality to save us, if not here, at any rate hereafter. As to the Bible, some believe that it was "written by God," and must therefore be infallible throughout; others restrict its infallibility to moral and spiritual subjects; others again state that even in these matters its teaching is often degraded, and that much of what it says about right and wrong and about the nature of the Deity is utterly false and profoundly pernicious. As for the Prayer Book, some profess to accept the thirty-nine articles and all the rest of it. while to others it seems a very unsatisfactory compilation, often flatly contradicting both the Bible and itself. And the ceremonies of the Church of England vary no less than the doctrines. Its ritual ranges from the baldest evangelicalism, where the sole vestments are a surplice and "decent tippet," and where the dreary monotony is relieved only by a choir singing out of tune, to the most advanced Pusevism, where you find chasubles, copes, mitres, acolytes, incense, confession, and everything that has ever received the sanction of Rome. Finally, there is not complete agreement among the clergy even in regard to the value and importance of the Christian religion; for one well-known divine—Canon Taylor—emphatically asserts the superior efficacy, under certain circumstances, of the religion of Mohammed.

Now the priests of the Church of England, holding these different doctrines and practicing these different rituals, are all "successors of the apostles"; at least they have all received episcopal ordination, and they must all, therefore, be in possession of the advantages which such ordination confers. Some of them, no doubt, would be ready to accuse the others of having "fallen from grace"; but, fallen or not, they continue to be members of the Church and to minister as priests at its altars. The efforts which are occasionally made to turn them out are almost always unsuccessful, and at the present moment there is every possible diversity both of opinion and practice among those who are act-

ually holding the priestly office. This may be regarded—no doubt it often is—as an unpleasant fact; but its unpleasantness does not make it any the less real. Whether people like it or not, the fact remains that in the English Church, as at present constituted, the priesthood is open to men altogether irrespective of the doctrines they believe and the ceremonies they practice. Neither doctrines nor ceremonies have anything to do with our church as such. In the language of logicians, they are merely its accidents, not part of its essence.

Prosecutions for heresy, when they fail, as they generally do, and sometimes even when they partially succeed, bring this fact into striking relief—an irony of retribution which must be very galling to the prosecutors. In the judicial decision given in connection with the "Essays and Reviews," \* it was laid down that the books of the Bible may be subjected to the fullest and freest criticism, and that a clergyman is within his rights even if he accuses an inspired author of willful and deliberate dishonesty. We are legally debarred, it is true, from denying the canonicity of any of the Scriptures; but the greatest heretic in the world can never feel tempted in that direction. For to be canonical and to be in the Bible are synonymous expressions. The books of the Bible are the books of the Bible, and no sane man would ever dream of saying they are not. What occurred some years ago in Manchester affords a still more remarkable illustration of the fact that theological prosecutions serve only to emphasize our church's indifference to theology. In that town were two priests, named respectively Green and Knox-Little, who both professed the same "high" creed and both practiced the same elaborate ritual. The former, being the less popular of the two, was less expensive to prosecute; he was therefore selected for that purpose by the Church Association, and was condemned to a term of imprisonment. While he was still in jail, Knox-Little was promoted to a canonry. Here was a reductio ad absurdum of the opinion that our church concerns herself with creeds or rituals. It was shown to be the falsest of delusions. For of two men whose creeds and rituals were identical, the one was placed in a cathedral stall and the other found himself in an ecclesiasti-

<sup>\*</sup> See the report of the Williams and Wilson trial.

cal dungeon. The punishments and rewards of the Church of England are administered with sublime disregard for the doctrines and ceremonies of their recipients.

Even in past generations the clergy differed to a very considerable extent from the Prayer Book and from one another, but up to the year 1865 they went on quietly making a subscription which implied that they were all agreed. The declaration contained these words: "I, A. B., declare my unfeigned assent and consent to all and everything prescribed in and by the Book of Common Prayer." We should probably be required to sign the same subscription to-day but for the intervention of the late Dean of Westminster, from whom it received its death blow. I may mention, however, that two ineffectual attempts to relax the subscription had been previously made, the one in 1772 by Archdeacon Blackburn and the other in 1862 by Bishop Stanley, father of the Dean. But in 1862 the late Dean of Westminster addressed a protest to the Bishop of London, and pointed out the extreme absurdity of flying in the face of facts, and the gross immorality of exacting a subscription which could only be a lie. The Dean said that the clergy could not assent to the literal and dogmatic meaning of the six hundred propositions, on the most intricate and complex subjects, which the articles embody; they could not assent to the literal and dogmatic meaning of all the sentences in the liturgy, many of which are poetic and devotional in form, but which must be received, according to a strict subscription, in their most matter-of-fact signification; still less could they assent to both these sets of propositions, emanating from ages unlike each other and each no less unlike our own. And the Dean further showed that, even supposing the clergy could assent to all and everything contained in the Prayer Book, as a matter of fact they did not. The sixth article, for example, to take one of his illustrations, "understands by 'Holy Scriptures' those canonical books of the Old and New Testaments of whose authority was never any doubt in the Church." Taken literally, subscription to those words would exclude from the clerical profession all who receive as Holy Scripture the epistle to the Hebrews, the Apocalypse, the second epistle of St. Peter, the epistles of St. James and St. Jude, and the second

and third epistles of St. John, of whose authority it is well known there was considerable doubt in the early Church. Yet this statement of the article was not only overridden, but even forgotten; and the vast majority of the clergy, in defiance of the article and of their subscription to it, received as Holy Scripture without scruple those books of whose authority there was doubt in the Church for no less than three important centuries. They even attacked as heretical those who adopted the language of the article itself. "So that," concluded the Dean, "if once we press the subscriptions in their rigid and literal sense, it may safely be asserted that there is not one clergyman who can venture to cast a stone at another; they must all go out, from the primates at Lambeth and Bishopsthorpe to the humblest curates of Wales and Westmoreland."

On these grounds, therefore, Stanley prayed the Bishop of London, the rest of the Episcopate, and the legislature in general, to take the whole question of subscription into their serious consideration. In the following year a royal commission was appointed, and the result of their inquiry was the introduction of a bill by Lord Granville, in which the old form of subscription was completely set aside. The new form ran thus: "I, A. B., do solemnly make the following declaration: I assent to the thirty-nine articles of religion and to the Book of Common Prayer. I believe the doctrine of the Church of England, as therein set forth, to be agreeable to the word of God."

The enormous scope of the change may scarcely at first sight be apparent in this clumsy form of words. But it was brought out clearly enough by Mr. Buxton in his speech before the House of Commons. He said:

"It was the express intention of the commissioners to relax the extravagant stringency of the existing tests; in other words, to make it possible for men to minister at the altars of the Church, though they might dissent from some part of her teaching. . . . Instead of declaring his assent to all and everything the Prayer Book contains, a clergyman now only declares his assent to the Prayer Book itself, that is to say, to the book as a whole, and his belief that the doctrine of the Church therein set forth is agreeable to the word of God. He does not declare that the doctrines, in the plural number, or that each and all of these doctrines, are agreeable to the word of God, but only the doctrine. It was expressly

and unanimously agreed by the commission that the word 'doctrine' should be used in the singular number, in order that it might be understood that it is the general teaching of the Church, not every part and parcel of that teaching, to which assent is given."

This act of Parliament \* is very seldom mentioned, and I believe that it is very little known. But whether the clergy are aware of it or not, the act has been passed, and the character of our church, as essentially a broad church, has been thereby legally determined.

For let us ask, as all intelligent men and women sooner or later will ask, what is this "general teaching of the Church," this "doctrine in the singular number"? It is, it can only be, And there is but one all-comprehensive synonym for Christ, namely, righteousness. He "gave himself for us that he might redeem us from all iniquity, and purify unto himself a peculiar people zealous of good works." Every Christian church properly so called must be concerned exclusively, or at any rate chiefly, with the promotion and development of righteousness. And this fact is admitted in the Prayer Book, though the admission was probably neither seen nor intended by its compilers. According to one of the rubrics preceding the communion service, only "the notorious evil liver" can be kept away from "the table of the Lord." It was perhaps thought that this would be taken in connection with the catechism and the confirmation services; and it may have been assumed that all who had gone through the preliminary training would continue orthodox to the end. But nothing is said to that effect; and therefore, though a man refuses to accept the creed adopted for him by his godfathers and godmothers, though he no longer agrees with the profession of faith which he made at his confirmation, and though he is a very skeptic of skeptics, he must, according to the law of the land, unless he is a notorious evil liver, be received by the priest as a communicant. So that we have, in every celebration of the communion, little as the clergy seem to suspect it, another witness to the fact that our church as such cares nothing for doctrines or ceremonies; that righteousness, or rather the absence of flagrant unrighteousness, constitutes a sufficient title to its membership.

<sup>\* 28</sup> and 29 Vic., c. 122.

This conception of the Church, though unorthodox, is scriptural. "In every nation he that . . . worketh righteousness is accepted," and is therefore a member of "the general assembly and church of the first-born." And I have shown over and over again \* that Christ held the same views as to the nature of religion. In one sense, then, the broadest of broad churchmen may be accused of going backward as far as the rest of his clerical brethren; nay, farther, for they generally find themselves satisfied with the third or fourth century. But just as there are two kinds of skepticism, the one which doubts for the sake of doubt, the other which seeks only "firm ground of assurance," so there are two kinds of retrogression. Some go back that they may ultimately stand still, others that they may find the best path for progress. Nor is it difficult to show that a return to the idea of the paramount importance of righteousness is essential to the development, and even to the existence, of the churches.

No church can permanently survive unless it appeals to the reason, the conscience, the common sense, of mankind; unless it is felt to be in harmony with the organic development of the race. But ecclesiasticism shocks our reason by its silly claim to infallibility and finality; it outrages our conscience by its wicked preference of creed to conduct; it violates our common sense, for its very deities are represented as more or less arbitrary, unreasonable, and bad. Further, ecclesiasticism is quite incapable of development within itself, and it is a hinderance to all development without. The theology inherited from St. Augustine or Calvin cannot grow, except, it may be, by the addition of a few theorems as uninteresting, not to say irritating, as the rest. The ritual which comes to us from Edward VI. cannot be expanded, except perhaps by the addition of a few trimmings to ornaments that are already more than sufficiently gorgeous. And what is worse than its own incapacity for growth, is the obstruction which ecclesiasticism offers to the progress of the world. organic growth of the race is a conception quite beyond the ecclesiastical range of vision, and indeed quite incompatible with the ecclesiastical system. That system professes to be complete in itself, and disclaims all connection with the other religions and

 $<sup>\</sup>pmb{\ast}$  See, for example, my "Church and Creed," pp. 80–91.

philosophies of the world. Its crowning glory is to exist in an irrational isolation. Its supreme aim is to bring all human thoughts and endeavors within the narrow limits of its own cut-and-dried theology.

In these days of advancing knowledge and advancing courage, such a system cannot have long to live. The churches at present are in a state of unstable equilibrium, and within a measurable distance of annihilation. Though scarcely any of the clergy can be called thinkers, there are still among them, I admit, many scholars of deservedly high reputation. But in fifty years' time even the scholars will be conspicuous by their absence. In the English universities it is but rarely nowadays that distinguished students go into the Church. Educated menand I need hardly point out that a knowledge of Greek and Hebrew is not in itself education, for he only can be called educated who has some acquaintance with the best thoughts and achievements of the race—educated men who feel that their heads and lives are worth something refuse to fling them into the vortex of ecclesiasticism. And unfortunately ecclesiasticism is generally confounded with the Church. It is not understood that the church properly so called is something different, something infinitely superior, to any temporal and local church, such as that of England or that of Rome. It is not understood that the true church is absolutely opposed to ecclesiasticism. Those who take orders in any particular church almost invariably do so with the view of keeping alive its errors, scarcely ever for the purpose of leading it to the truth. And so it comes about that the ranks of the clergy are recruited every year from a lower intellectual class. But if only men can be got to see the essential difference between churches as they are and churches as they should be; if they come to understand that there is no necessary connection between "going into the church" and supporting the corruptions of ecclesiasticism; then the best of our graduates will begin to feel that there is still noble work—the very noblest—to be done "in orders," and clergymen themselves, in the future, will be among the most powerful opponents of ecclesiasticism. At any rate, whether the clergy take part in its destruction or whether it is destroyed in spite of them, it is most assuredly doomed.

The churches of the future will be founded on the idea of righteousness. "Other foundation can no man lay." Any narrower church is unworthy of humanity and of God, and will, in the natural course of events, be swept away. The gods of ecclesiasticism have very often been devils. But the true God is a perfeetly good Being, and his church must therefore be co-extensive with the race. In righteousness, and in righteousness alone, we have an idea that will unite all men by a common bond. righteousness, and in righteousness alone, we have an idea capable of indefinite expansion, of unceasing application to the everchanging, ever-growing necessities of human life. A church founded on the idea of righteousness is a church which all wise men must approve, which all good men must love, for righteousness is absolutely necessary for the well-being of mankind. A church founded on the idea of righteousness is part of that eternal and universal church which existed long before the Christian era, which will continue to exist when every ecclesiastical institution in Christendom has collapsed. Ecclesiasticism must be destroyed before religion can begin. The churches of men must be revolutionized in order that the church of God may be saved.

And, as I have shown, the revolution which is necessary can be effected more readily in the English Church than in any of the rest. It is, so to speak, revolutionized already by implication. The Church of England, as by law established, is actually standing on the true foundation. If only she will not tear herself away, if her clergy will but recognize where they have drifted in the course of evolution, or rather, let us say, in the providence of God, she will enter on a career of triumphant and never-ending progress. And what is true of my own church is true of all others. When they have been thoroughly purged of ecclesiasticism—but not till then—the churches of the world will become the churches of our Lord and of his Christ.

ALFRED MOMERIE.

## THE TRANSMISSION OF CULTURE.

A GREAT prophet of science has arisen, in the person of Professor August Weismann, of Freiburg, who has essayed \* to prove that what biologists call an "acquired character" is not hereditary. An acquired character is one that is not congenital, but has arisen, no matter how, since the birth of the organism possessing it. Professor Weismann naturally confines himself chiefly to animals and to modifications that take place in their physical structure, and he maintains that wherever such modifications descend to the offspring of such animals they cannot have been acquired by the animals during their lives, but must have previously existed in a latent state in their reproductive germs, and have been handed down from ancestors more or less remote. Mr. Francis Galton had anticipated Weismann in the expression of similar views, but he made them less absolute, and did not insist upon them with so great emphasis. He applied them, too, chiefly to man, and dealt with mental as well as with physical qualities. With the mental qualities of the human race, we are just now exclusively concerned, and we must leave the biologists to settle the question as regards animals and plants.

Weismann could not, of course, wholly ignore mental qualities, and the following passage from his book will serve to show that he does not exempt them from his law. At the same time, it may be taken as a sample of his reasoning and as a sort of text for what is to follow. He says:

"The children of accomplished pianists do not inherit the art of playing the piano; they have to learn it in the same laborious manner as their parents acquired it; they do not inherit anything except that which their parents also possessed when children, viz., manual dexterity and a good ear. . . . The pianist may by practice develop the muscles of his fingers so as to insure the highest dexterity and power; but such an effort would be entirely transient, for it depends upon a modification of local nutrition

<sup>\*&</sup>quot;Essays upon Heredity and Kindred Biological Problems." Authorized translation (Oxford, 1889).

which would be unable to cause any change in the molecular structure of the germ cells, and could not therefore produce any effect upon the offspring."

It may be observed that this passage contains two very distinct statements, which are confounded by Weismann, and have been generally confounded by writers on heredity. It is perfectly true that "the children of accomplished pianists do not inherit the art of playing the piano." But "the art of playing the piano" is really a form of knowledge, and no one has ever maintained that knowledge can be transmitted. It is necessary to distinguish sharply between knowledge and the capacity for acquiring knowledge. It is this latter only that has been generally believed to be hereditary.

Knowledge is of two kinds, subjective and objective-knowing how and knowing what. The former is the knowledge of handicraft, or art; the latter is the knowledge of facts and their relations, or science. Neither can be acquired except through the senses, and both have to be learned by repetition and memory. It is as absurd to say that a knowledge of piano execution can be inherited as it would be to say that a knowledge of the multiplication-table can be inherited. Both require a prolonged mnemonic drill of the appropriate faculties. To learn to play the piano it is necessary to learn what a piano is, how its keys are arranged, and how its tones are adjusted. It is also usually necessary to acquire the rudiments of European music, to which the piano is adapted, to learn to read written music, and to understand the relations of the musical characters on a sheet of music to the corresponding keys of the instrument. This does not differ from learning to read print, and certainly no one claims that the ability to read can be inherited. I have dwelt somewhat upon this point, because, simple as it may seem, no one has touched upon it in the prolonged discussion of Weismann's theories, and statements such as this have been allowed to weigh against the transmission of acquired characters. Being so obviously true, they have been supposed to have a peculiar force, when in fact they have no force at all, because they are wholly irrelevant.

The remainder of the passage quoted is to the point, and in

view of the state of popular opinion on such subjects, would doubtless be generally rejected as contrary to common observation. But we live in an age when popular beliefs are being constantly put to the test of exact science. Mere prevalence of opinion is no longer a legitimate ground for accepting any proposition. The most universal and long-standing dogmas have proved untrue, while the unpopular heresies opposed to them have often been found to correspond much more nearly to the reality. Is the doctrine of the transmissibility of mental aptitudes acquired through education—using that word in its widest sense—to be relegated to the limbo of exploded beliefs? And is the opposite proposition the true one—that acquired talents cannot be passed on to a future generation?

Such is the problem before us, and its immense importance must be obvious at a glance. Its settlement, supposing that it can be settled, must profoundly influence the action of every class of men who are sincerely working for the good of the race, and the side of this question which each individual espouses cannot but determine his course in everything that he undertakes. The educationalist must be governed by it in all his plans for human culture. The social reformer will be guided by it in all schemes for the improvement of society. Even the statesman and the legislator cannot fail to be affected by it, and will shape the policy of the state in a very different way for a race that is to develop through its own exertions, from the way in which they would shape it for a race that is completely at the mercy of the little-known processes of "natural inheritance."

Nor is the question now, viewed from the standpoint of scientific authority, any longer a one-sided one. In England, aside from Mr. Galton, there are to be counted among the followers of Weismann such eminent scientific specialists as Mr. W. T. Thistleton Dyer, Director of Kew, Prof. E. Ray Lankester, and, so far at least as animals are concerned, Dr. Alfred Russel Wallace. Led by such lights as these, perhaps one half of the biologists of England have subscribed, with or without qualification. to the Weismannian doctrine.

So long as the question is confined to the lower forms of life, it must be confessed that the defenders of the transmissibility of

acquired characters are placed at a disadvantage, on account of the difficulty of proving that the facts to which they point are not capable of a different interpretation, and that they may not be equally well explained by the all-embracing law of natural selection. But when the human species is to be treated, the tables are, in a manner, turned. Dr. Wallace, co-discoverer with Darwin of the law of natural selection, has denied from the first that that law applies without qualification to man. His defense, therefore, of Weismann's views constitutes a singular anomaly. But the fact that, in attempting to account for the development of the human faculties, he abandons the scientific method and, in the language of Prof. E. Ray Lankester, "has recourse to a metaphysical assumption," does not invalidate his early claim. That claim was that such development cannot be due to the action of natural selection, since this can operate only where the quality to be developed possesses such a direct advantage in the struggle for existence as to increase the chances of reproduction and to insure the survival of those individuals endowed with it.

So far as the development of brain mass and consequent brain power is concerned, it must be conceded that no "character "could possibly be more directly the subject of natural selection, since the primal quality of brain is cunning, and this is more important in fitting a creature to survive than any other attribute. It is, therefore, only in the cases of certain derivative faculties that have little or nothing to do with the fitness to survive, many of them rendering man unfit and almost helpless in the struggle for existence, that we find the really strong claims of those who advocate the doctrine of the inheritance of acquired mental qualities, or post-natal increments to faculties already existing. What are these qualities? Dr. Wallace believes them to consist chiefly of the mathematical, the esthetic (sculpture, painting, etc.), and the musical; but he also very properly mentions the power of abstract reasoning, the metaphysical faculty, or talent for abstruse speculation, that which gives rise to wit and humor, and the moral or ethical attributes. Others might be enumerated, such as the talents for scientific observation, for laboratory experimentation, for mechanical invention, and for literary research; and, in general, all the powers of mental application, abstraction, and attention, of study, and of investigation, by which knowledge has been increased. On the side of art might be added also the faculty of diction, both written and spoken, poetry, oratory, and style in writing.

It is certainly not necessary to explain that these biologically non-advantageous attributes, though highly derivative and without any place in the great scheme of organic development, have become to civilized and enlightened man not only the most advantageous of all his mental possessions, but the chief marks by which he is distinguished from the animal world below him. More than any and all physical distinctions, these constitute him man. Yet all derivative faculties do not belong to this class, for that of money-getting, whether in legitimate business ways or by sharp speculation, that of political and social intriguing to better one's condition, and many others, are but so many refined modifications of the primitive animal cunning, calculated to evade the protective institutions of society, and to secure by still greater indirection the personal advantages no longer attainable by brute force or sagacity. These have, therefore, developed through the survival of the fittest, and belong to the normal competitive class characteristic of the lower animals.

It is quite otherwise with those higher intellectual, esthetic, and ethical faculties first enumerated, and this is admitted by Weismann when he says that "predispositions which we call talents cannot have arisen through natural selection, because life is in no way dependent upon their presence." But he denies that they are due to the inheritance of what is gained by individual effort, and asserts with emphasis that "there is absolutely no trustworthy proof that talents have been improved by their exercise through the course of a long series of generations." He reminds us that men who have displayed special talents have most commonly been the only persons in their lines who have possessed such; that others are known to have inherited them, not from their parents directly, but from more or less remote ancestors; that quite varied talents have often cropped out in the same family; that highly-gifted men frequently emerge from the masses; and that great events are certain to evolve appropriate leaders of any popular movement. Therefore, he argues,

such powers of mind must be due to certain subtle influences at work through heredity in society; and the commingling of innumerable and widely-different ancestral germs, co-operating with favorable conditions for their manifestation, must suffice to explain the observed facts. Dr. Wallace offers a very different explanation, and holds that the facts "clearly point to the existence in man of something which he has not derived from his animal progenitors—something which we may best refer to as being of a spiritual essence or nature, capable of progressive development under favorable conditions."

On the other hand, Mr. Galton, although leaning strongly against the doctrine of the transmission of acquired qualities, has, in his "Hereditary Genius" and other works, ably shown from concrete examples that high qualities of mind tend to run in particular families, and has done much to disprove the popular notion, relied on by Weismann, that they are spasmodic products of the Zeitgeist. In the same line with Galton, M. Alphonse de Candolle, himself a notable example of "hereditary genius," has collected an additional mass of facts in support of the view that talents tend to persist in certain families or lines of descent. There are, it is true, many apparent exceptions to this rule, but most of them could probably be explained if all the facts were known. It is not to be supposed that there will be in every case a series of direct descendants, all displaying the same mental powers in a progressively increasing degree. Aside from the now well-understood law of atayism, which often makes long breaks in such series, a multitude of other influences tend to modify and distort the effects, and finally wholly to destroy them. The most important of these influences is, of course, the commingling of different strains in the two parents. The single fact that, as a rule, the sexes prefer their opposites would rather make us wonder that any one class of mental qualities can be perpetuated through two generations. And it is the recognition of this fact that has led some to propose an abandonment of the rule of personal choice, and to recommend the selection by parents and guardians of similar natures, instead of opposite ones, to be the parents of the race. But such persons forget that in the union of opposites nothing is lost of the qualities of either,

but only the tendency to extremes is checked. And, assuming the qualities thus neutralized to be worthy, many maintain that this leavening of the whole mass of society is more to be desired than the exaggeration of a few of even the noblest attributes.

Weismann and his followers do not generally deny that the faculties above enumerated have increased, and greatly increased. The chief explanation seems to be that this is effected by the fortunate union of varied ancestral qualities in the developing germ. Prof. E. Ray Lankester argues that they may have arisen more or less suddenly, as in the case of what are called "sports," and that this may be brought about by external influences acting abruptly and spasmodically upon the reproductive elements of the parents. He denies that the nature of the effect can have any qualitative relation to the cause, and compares this relation to that which the shaking of a kaleidoscope sustains to the change produced in the images exhibited. To the average mind this certainly seems far less reasonable than to suppose that the prolonged exercises and intense activity of a particular faculty has the effect, in some unexplained way, of producing in the parental germ a corresponding alteration which is capable of perpetuating itself in the offspring, and thus of transmitting to descendants the increment acquired by the parent through cultivation and personal exertion.

But aside entirely from all abstruse theories as to how heredity takes place, we have at least the following general facts, which can best be explained by the theory of the transmission of acquired qualities: Correlated with the general process of cephalization, which is admitted to be due to other causes, a large number of highly derivative and greatly specialized mental attributes that offer no advantage in the struggle for existence have made their appearance in man. These have arisen, so far as we know, only under the protection of such social institutions as are calculated to exempt a portion of the race, for longer or shorter periods, from the necessity of devoting its energies exclusively to the maintenance of physical existence; that is to say, they are the products of leisure, and represent the surplus mental energy insured by civilization. With the satisfaction of physical wants these intellectual, esthetic, and ethical wants have arisen, grown

powerful, and been attended with intense emulation. This has led to the incessant and vigorous exercise of these derivative faculties. Although not advantageous in the biological sense, these faculties have, nevertheless, been strengthened and increased pari passu with their exercise. They are most highly developed in those persons who have most strenuously cultivated them, as witness the ethical cast of the Hebrew mind, the talent for sculpture among the Italians, and the musical genius of the Germans. The faculties themselves are clearly hereditary and, notwithstanding parental crossing and other distributive influences, tend perceptibly to persist for a longer or shorter period in particular families.

The whole point at issue is whether there is a causal relation between the cultivation of these faculties and their development; in other words, whether the increment gained by their exercise is transmitted to posterity. Professor Weismann and most of his followers, constituting what is now generally known as the school of Neo-Darwinians, deny such transmission. If they are right, education has no value for the future of mankind, and its benefits are confined exclusively to the generation receiving it. So far as the inculcation of knowledge is concerned, this has always been admitted to be the case, and the fact that each new individual must begin at the beginning and acquire all knowledge over again for himself is sufficiently discouraging, and has often been deplored. But the belief, though vague, has been somewhat general that a part at least of what is gained in the direction of developing and strengthening the faculties of the mind, through their life-long exercise in special fields, is permanently preserved to the race by hereditary transmission to posterity of the acquired increment. We have seen that all the facts of history and of personal observation sustain this comforting popular belief, and until the doctors of science shall cease to differ on this point and shall reduce the laws of heredity to a degree of exactness which shall amount to something more like a demonstration than the current speculations, it may perhaps be as well to continue for a time to hug the delusion.

LESTER F. WARD.

## CHEMISTRY TO-DAY AND ITS PROBLEMS.

If we compare the chemistry of the present day with that existing in the earlier half of the century, we certainly see no epoch-making, far-reaching discovery such as that which has marked the sister science, biology. There is nothing which warrants us in speaking of the "new" or of the "old" chemistry. Nevertheless we have witnessed a most important advance. Our science is gaining a more complete organic and internal cohesion, and is entering into closer federal relations with the other sciences, giving and receiving fresh light. Chemistry, in conjunction with physics, furnishes astronomy with a new and most powerful method of research, and with a new body of facts and generalizations. But to these results we have no occasion to refer, as they have been ably explained by Professor C. A. Young.\*

At the same time, chemistry is deriving new light from the very opposite direction. Not many years ago few persons, if any, surmised that certain microscopic living beings-microbia, or micro-organisms—could be powerful agents of combination and decomposition, not merely in living plants and animals, and not alone in dead organic matter, but even in the mineral kingdom. Some time ago the researches of Schloesing and Muntz, of Marcagno, of P. F. Frankland, and of others showed that the decomposition of dead organisms into their components depends mainly on the action of microbia which break up blood, flesh, leaves, and even wood, into carbonic acid and ammonia. Living organisms further convert the ammonia into nitric acid, which, if potash is present, forms saltpetre. By a due selection of different ferments—all of them living organisms—we can produce, in a solution of sugar or a decoction of malt, alcoholic liquors having the actual aroma and flavor of the choicest wines. More remarkable still, it is now proved that the green rust on antique bronzes is a product of microscopic plant life.

<sup>\*</sup> The FORUM, September, 1890.

The interfusion—not confusion—of chemistry and physics is being rapidly developed, and is constantly proving more and more fruitful. Just as the miner is apt to find the amplest booty where different rock formations meet; just as the flora and the fauna are richest where land and water adjoin each other; so also the border land of chemistry and physics forms the happy hunting ground of the experimentalist—a truth which I would strongly urge upon every student.

We were told formerly that bodies cannot act upon each other chemically except after they have been dissolved. Yet even gravitation, the least versatile form of energy, can, when it acts as pressure, compel certain solid bodies to enter into mutual combination even at ordinary temperatures. W. Spring, a Belgian chemist, by submitting sulphur and copper, in the form of fine powder, to an enormous pressure, has been able to combine the two chemically, forming a copper sulphide; and, in an analogous manner, it is possible to form the sulphides of other metals which have a powerful affinity for sulphur. This experiment has a most important bearing upon the formation of minerals in that part of nature's laboratory which we call the interior of the earth. Of the processes in play in that laboratory we know very little, as our main evidences are merely rocks raised by upheavals and matter ejected by volcanoes.

An important result of the joint action of low temperature and intense pressure is the liquefaction, and even the solidification, of gases. Faraday formerly experimented in this direction with no little success, but certain gases bade defiance to the resources at his disposal and remained in the gaseous condition. Consequently in old text books we used to read of "condensible" and of "permanent" gases. But of late the question has been re-opened with improved methods and more powerful appliances. Pictet, Cailletet, and Wroblewski have been so successful that the class of "permanent gases" has disappeared. It has been asked what would be the condition of any substance, or of matter in general, if it could be exposed to the temperature of absolute zero supposed to exist in the depths of space. Such a body, so far as we can judge from approximate experiments, need retain none of the properties of matter save inertia and

impenetrability. We even hesitate to say how far it might be entitled to be called matter at all.

Chemical compositions and decompositions may be effected, in a variety of eases, by a shock or a vibration. The slightest touch may cause certain bodies to assume a crystalline structure or to change color. In other cases a blow may lead to a complete decomposition attended with combustion and explosion. The effects of prolonged vibration upon chemical compounds have not been thoroughly studied. It is found impracticable to preserve wines in a cellar situated near a powerful tilt hammer which keeps the earth around in constant tremor. But the part played by gravitation in any of its forms in chemical phenomena is trifling in comparison with the interaction of heat and chemical forces. Heat is at once a cause and an effect of chemical change. We can rarely form or decompose any chemical compound without either absorbing or liberating heat. The quantity of heat lost or gained in such cases has been proposed as a means of measuring chemical affinity, for which, unlike heat, electricity, or light, we have no direct method of estimation. The special study of this subject, known as thermo-chemistry, was undertaken in a rudimentary manner by Lavoisier and Rumford in the last century. Lavoisier laid down the law that as much heat is required to decompose a compound as is liberated by the combination of its constituent elements. The thermo-chemical process was studied more completely by Hess, Andrews, Graham, and Favre, about 1840. In the mean time the mechanical theory of heat was developed by Joule and Clausius, and was applied in 1853 to thermo-chemistry by Julius Thomsen, of the University of Copenhagen. This chemist is still continuing his researches, in which he has been joined since 1863, with occasional controversies, by M. Berthelot. Their results have shed a novel light both upon pure chemistry and upon the chemical arts. In both we thus obtain the power not merely of explaining results, but often of foreseeing them. An exposition of thermo-chemical laws would be too technical for the present article.

The interaction of light with chemical activity, though not less important, is less conspicuous. From the consideration that every objective optical phenomenon can be photographed, it follows that the geometrical laws of light hold good for the chemically-active portion of radiant energy. As a rule, rays of short wave length—those, that is, in which the number of vibrations in a second is greatest—are most capable of chemical activity. In the most important case, however, namely, the decomposition of carbonic acid in the tissues of green plants, the rays of greater wave length are most active. In the act of sight, which depends on an irritation of the retina and is probably a chemical process, the yellow and green rays are the most efficient.

Chemical change appears also as a cause and an effect of electricity. We no longer find ourselves able to accept the electro-chemical theory of Berzelius, according to which two elements enter into combination and remain combined because the one is relatively electro-negative and the other electro-positive. This theory led its illustrious originator to oppose Faraday's law of electrolytic equivalents and the theory of substitution proposed by Dumas, both of which have since been accepted as perfeetly true. But we have not yet succeeded in establishing in its place a sounder electro-chemical theory, which is still one of the wants of our science. We know, as a general rule, that a positive element is eliminated from a combination by a stronger positive element, and that a negative element is driven out in like manner by a stronger negative one. But we are not able, in virtue of such reactions, to ascertain the place of an element in the series of electric tensions. Such a series is needed, but its preparation will prove no easy task. We now make extended use of electric action in the analysis and assay of mineral matters, and even in metallurgical operations on a large scale. We have been convinced, thanks to the researches of Arrhenius, that solutions of salts and of powerful acids and bases contain these substances, as such, only to a small extent, the greater part of them being dissociated into ions. We find, too, that chemical properties may be greatly altered by an electrical charge.

The greatest portion of the activity of chemists is at present turned to the discovery of new compounds, especially organic compounds. To such an extent is this the case that an entire number of the FORUM would not suffice for a bare catalogue of the novelties thus brought to light. Some of these compounds are,

or may be hereafter, of technical or commercial importance; but the great majority of such discoveries throw no light on the principles of the science, and are devoid of interest except to the chemical specialist. Some discoveries, however, have lately been made which may teach important lessons, and to a few of these I must briefly draw attention. In the dreams of the alchemists a body figured under the name of "alcahest," which was supposed to be a universal solvent, and which, consequently, if obtained, would be incapable of preservation. It has long been conjectured that fluorine, if it could be produced in a free state, would probably possess the very properties attributed to this mysterious alcahest. Many attempts, made by Knox, Baudrimont, Louyet, and others, proved vain; but lately a French chemist, H. Moissan, has obtained free fluorine. It is interesting to find that fluorine possesses the very properties which were expected on theoretical grounds, and which the old alchemists had assigned to their alcahest. It is curious to note that this formidable element exists free in nature, although in very small quantities. On crushing fluor spar a corrosive gas is sometimes emitted which possesses the general properties of fluorine.

Much doubt has existed concerning the ultimate source of the combined nitrogen that exists in plants and forms a necessary item in their food. Some chemists of the highest eminence have maintained that, while plants are capable of absorbing and fixing in their tissues the ammonia and oxides of nitrogen present in the atmosphere, they are utterly incapable of utilizing the free nitrogen that exists in such vast quantities in the air. This question is not merely of deep theoretical interest as relating to the balance of life upon the globe, but it is of supreme importance to man on account of its reference to the fertility of the soil and to our future supply of food. It has been fully demonstrated that, at least in Europe, the yearly amount of combined nitrogen brought down upon an acre of soil by the agency of rain and dew does not make up for the quantity taken away in the various crops. Hence, even if we return to the land all the animal and vegetable refuse into which its products are ultimately converted, the fertility of any given plot must in the long run decline, unless, in some manner or other, a portion of the free

nitrogen in the atmosphere is absorbed and rendered available for the nutrition of plants. Source after source has been suggested as probable, and finally declared to be inefficient. At last one has been found in a most unlooked-for quarter. Practical agriculturists have long since reached the conclusion that certain green crops, such as peas, beans, lentils, and vetches, are not so exhaustive to the soil as wheat, maize, turnips, and potatoes. Now if we examine the rootlets, say of kidney beans, we find them studded more or less thickly with small knots or tubercles, which are the abode of a special kind of bacteria. These bacteria have the power of fixing the free atmospheric nitrogen in such a manner that it may serve as a food for the plant. Accordingly if we sow a field with such vegetables and plow them into the soil at the end of the season, they prove efficient fertilizers. On the other hand, if the formation of these tubercles on the roots has been prevented, the plants do not flourish and the soil is not enriched. But even if it is demonstrated that the soil is benefited by a rotation of crops in which leguminous plants are duly prominent, this result does not justify our present profligate system of running the organic waste of our cities into the sea or destroying it by fire.

We have next to take a glance at an alleged elementary body, said to have been discovered in Damara Land, South Africa, and named hence damarium. Two prospectors observed small jets of a gas issuing from the sand. It proved to be specifically lighter than hydrogen, hitherto the lightest body known, and, as far as could be roughly ascertained, was of a lower atomic weight. I should not have noticed this discovery, had it not been given to the world in a paper of such standing as the "Chemiker Zeitung." If the existence and properties of damarium are verified, it will have to figure in the first line of our tables of atomic weights and to serve in place of hydrogen as the standard of comparison for the specific gravities of gases. It may, perhaps, prove to be identical with "helium," a body which on spectroscopical evidence is believed to exist in the sun.

A discovery, not yet generally accepted, has been made by Professor Kruss, of Munich, and Dr. W. Schmidt. They have found, it is alleged, in the purest nickel and cobalt, from one to three per cent. of a metal which has hitherto escaped detection. This is the more curious as these two metals have been closely scrutinized by Liebig, Woehler, Fresenius, and other chemists of high eminence.

Until very lately an element figured in our text books under the name of didymium. Its properties, and especially its atomic weight, had been determined in certain masterly researches; and it was recognized, according to one of the most familiar definitions of an element, as a "something to which we may add, but from which we can take nothing." But Dr. Auer von Welsbach, on examining this supposed simple body in a manner hitherto untried, was able to resolve it into two simpler bodies, which have received the names neodymium and praseodymium. Still this is not the end of the matter. Later researches, in which the present writer has had a part, show that neodymium and praseodymium are not the simplest bodies into which didymium can be broken up. Another case of this kind is that of Nordenskiold's gadolinium. This body had a fixed atomic weight, yet it has been broken up into yttrium, erbium, and ytterbium. I have found that yttrium consists of five or more constituents, previously unknown, and each of these constituents may prove further divisible if examined in some novel manner. Space does not permit me to develop the lessons of the "rare earths," which promise to throw a new light on the very foundations of our science and on the nature of the elements. In all probability they have been formed by a process of evolution, in which the "survival of the most inert" plays a role similar to that which the "survival of the fittest" is considered to take in biology.

Multitudes of discoveries have lately been made in the department of organic chemistry. Compounds which were formerly obtained by the aid of plants and animals are now formed synthetically; that is, built up, if not from their elements, yet from simpler combinations. The present labors in this direction, however, can possess none of the high philosophic interest which attached to Woehler's artificial production of urea. That grand discovery disproved the dogma that organic compounds are capable of formation only under the influence of life. This having been effected, further disproof is needless. Many of the

recent organic syntheses may be described simply as a war against agriculture. But there is a limit which is sometimes not taken into account. We shall ultimately, doubtless, be able to reproduce artificially every organic compound existing in nature. But there is no prospect that we shall be able to make artificially any organism or any part of an organism. Suppose we should be able to form synthetically malic acid, fruit sugar, and cellulose; we should not be in the least nearer to the power of making an apple. Wherever there is not merely peculiar chemical composition, but peculiar tissue, there the scope of chemistry is at an end. Hence, though the formation of starch and gluten may ultimately come within our power, we have no prospect of ever being able artificially to produce a grain of wheat.

Among the chief triumphs of organic synthesis must rank the formation of so-called "saccharine" by Professor Remsen and Dr. Fahlberg. This substance, we must bear in mind, has none of the properties of sugar except sweetness. It does not in any way contribute to nutrition. It has its uses, doubtless, for sweetening the food of invalids to whom sugar would prove injurious, such as diabetic patients. On the other hand, it opens the door to a series of frauds, as a small quantity of it may enable various worthless substances, so long as they are soluble, to be sold as sugar. Its taste, moreover, is not exactly like that of sugar. Bees and wasps turn from it with an angry hum, and even flies will not touch it. But we must remember that the senses of many insects are not only more delicate than our own, but reveal differences which we cannot detect even with our instruments of precision. A bee will not touch beet-root sugar if cane sugar is at hand. It is, however, perfectly possible that chemical science may yet put us in possession of a true artificial sugar.

Other experimentalists have turned their attention to perfumes. The so-called fruit essences, which are supposed to communicate to confectionery and to liqueurs the flavors of pineapples, of the jargonelle pear, and of apples, are open to grave suspicion. It is not proved that their physiological action is identical with that of the fruits whose flavors they simulate. Some of the ptomaines and alkaloids extracted from putrid or diseased animal matter, though highly poisonous, possess the

odors of cinnamon, of the rose, or of the syringa. An artificial musk, recently obtained, not only gives off the exact odor of the natural product, but is said to have the same medicinal action. Hence the musk deer may consider itself disestablished.

The synthetic chemists have been most active and most successful in making dyes. Some natural coloring matters, such as turmeric, archil, and safilower, have been nearly superseded. But the two most important dyes, alizarine and indigo, have been not only imitated, but actually made artificially. The history of both is no longer novel, but I may mention that quite lately two chemists, one a Swiss and the other a German, have succeeded in producing artificial indigo at a price which will enable it to compete with the natural product. A recent inventor brings forward a so-called artificial silk. His product, however, is not silk, but merely cotton fiber modified so as to imitate some of the properties of silk. Hence it forms no exception to the rule that we cannot reproduce organic structures.

Attempts have been made, not without success, to form minerals. Artificial ultramarine has long been an article of commerce. The formation of the diamond is said to have been actually effected, but in the opinion of the inventor the process is so difficult and so dangerous, that the diamond-miner and the diamond-merchant need not feel uneasy. The ruby and the sapphire have lately been reproduced in Paris, and, curiously enough, the coloring matter in both is found to be due to one and the same metal—chromium—in different states of combination. Red and blue stones, or an intermediate violet form which might be likened to the rare and beautiful oriental amethyst, have been obtained in one and the same operation, from the same lot of material. The jewels thus produced have so far all been small; large enough to form the pivots of superior watch works, but not large enough to rank as rare and costly ornamental objects.

Passing, in conclusion, to more general considerations, we may note that our conceptions of atoms and molecules, as the component parts of matter, have been extended. Dalton and most of the chemists of the present day conceive of the atom as a body, minute indeed, but not infinitely so; divisible in the imagination of the mathematician, but not capable of being actually

broken up by any means at our command. The conflicting theory of Boscovitch, which was adopted by Faraday, regards atoms as mere mathematical points, centers of forces, or, as we should now say, forms of energy. To compare these two views in detail would be here impracticable, but several advances have been lately made in our insight into the conformation of matter. It has long been considered that the atoms are grouped together in so-called molecules. Each such molecule is composed of a fixed number, generally small, of atoms. These molecules, if they belong to one and the same chemical species, are alike in the number and the kind of atoms of which they are composed. But we find, on analysis, bodies which contain the very same substances in exactly the same proportions; and yet such bodies may differ in their boiling and congealing points, in their colors, in their odors, and in their physiological action. The only way of explaining these differences is by supposing that the atoms in each molecule are arranged differently, and that this modifies the properties of the substance. The arrangement of atoms in the molecules of a compound body is known as its "constitution," which must not be confounded with its composition. The constitutions of compound bodies have until lately been represented by certain formulas, which show the symbols of their elements disposed on a plane surface. It is now found that the mutual relations of such elementary atoms may be shown forth more clearly by supposing them to be disposed on a body of three dimensions. But this is not all. It appears now that the atoms in the molecule are not motionless, but that they are in a state of vibration or rotation—motion, in short, comparable to that of the bodies of the solar system. So minute are the atoms that, in a molecule which is not even visible to our senses, and which might be thought a concrete whole, they may be relatively as far apart as the sun and the planets.

We see thus that in chemistry, though we have gained much truth, though we have acquired the powers of creation and prediction, there are still not mere gaps, but abysses, to be filled up. For this task not one Curtius, but many, will be needed.

WILLIAM CROOKES.

### THE BERTILLON SYSTEM OF IDENTIFICATION.

In all ages questions of identity have excited the interest of men. Is it not at bottom a problem of this sort that forms the basis of the everlasting popular melodrama about lost, exchanged, and recovered children? Actual history is not less rich in facts and stories of this kind. Almost all the French historians, for example, have striven to identify the celebrated prisoner of Louis XIV., known as "The Man with the Iron Mask," not to mention the pretended descendants of J. J. Rousseau and of Louis XIV., who, in the face of all evidence, have succeeded in making some people take their claims seriously.

But it is naturally the world of criminals that has furnished, and yet furnishes, the greatest number of such attempts at deceit. It is not generally known by the honest public how large a number of malefactors have recourse to concealment of identity. We may assert without exaggeration that there is not a single habitual criminal who does not seek to hide his individuality when the circumstances of his arrest permit. The immensity of modern cities and the increasing facility of communication make this course more and more easy. International criminals, such as bank-robbers and pickpockets, traverse two continents, changing their names from country to country. The greater, therefore, becomes the necessity of some methodical system of identification.

It was believed for a short time, thirty years since, that photography was to give the solution of the problem. But the collection of criminal portraits has already attained a size so considerable that it has become physically impossible to discover among them the likeness of an individual who has assumed a false name. It goes for nothing that in the past ten years the Paris police have collected more than 100,000 photographs. Does the reader believe it practicable to compare successively each of these with each one of the 100 individuals who are arrested daily

in Paris? When this was attempted in the case of a criminal particularly easy to identify, the search demanded more than a week of application, not to speak of the errors and oversights which a task so fatiguing to the eye could not fail to occasion. There was need of a method of elimination analogous to that in use in botany and zoölogy; that is to say, one based on the characteristic elements of individuality, and not on the station and occupation of the accused, which may be erroneously given.

I may remark, in passing, that the absence of a natural method of classification is a reproach that applies equally to all means of judicial identification with which it has been sought to replace photography. Among these are: 1, impressions of the minute channels that traverse the skin of the thumb, according to a method introduced by Francis Galton, in imitation, it would appear, of one in use in China; 2, plaster casts of the jaw, suggested by certain dentists as a method of identification; 3, the markings on the iris, observed by practically the same method as that proposed by me a dozen years ago; 4, impressions, casts, or photographs of the ear, whose channels and ridges present so many individual varieties that it is impossible to find two human ears that are alike, and such great permanence in the same person that the form remains practically the same from infancy to old age.

It has been said, long since, that it is impossible to find two leaves exactly alike. Nature never repeats herself. Choose any part of the human body, examine it, and compare it carefully with the same part of another person, and differences will appear, more or less numerous, as your examination has been more or less minute. You will find external variations; internal variations in the skeleton, the muscles, the course of the veins and arteries; physiological variations in the gait, the expressions of the countenance, and the organic secretions. The dog who seeks his master in a crowd makes his way through it on a run, his nose to the ground. Homer tells us that after twenty years of absence, Ulysses, disguised as a beggar, was recognized only by his dog, "the faithful Argos, with excellent scent." Here is an element of individuality, and consequently of recognition, that escapes the sense of man completely. But a few words, pronounced in a natural tone and "Edisonized" by a phonograph, leave a convincing mark of identity. Where is the mother who would not recognize the voice of her son among a thousand? Thus the solution of the problem of judicial identification consists less in the discovery of new characteristic marks of individuality than in finding a means of classification. Certainly, I do not deny—to speak only of the Chinese method—that the channelled figures presented by the epidermis of the face of the thumb are at once fixed in the same subject and extraordinarily variable from one person to another, and that each individual thus possesses a sort of seal, which is both original and eminently personal. Unfortunately, however, it is also quite undeniable that these designs do not offer strongly enough marked elements of variability to serve as a basis for the classification of several hundred thousand cases.

The anthropometric method of description, of which I am the inventor, besides offering a variability as large as do those that we have enumerated, lends itself admirably to classification. That is its aim, its sole aim. It depends on the three following principles, which the experience of the past ten years has proved to be sound: 1. The facility and the rigorous exactitude with which the principal dimensions of the human skeleton are susceptible of being measured in the living subject, by means of a simplyconstructed pair of compasses. 2. The extreme diversity presented by the human skeleton from one subject to another—such a diversity that it is impossible to find two individuals possessing frames, I will not say rigorously similar, but even sufficiently alike to be confounded with each other. 3. The almost absolute fixity of the skeleton after the twentieth year. The height alone or, at most, the length of the femur, continues to increase for two or three years, but so slightly that it is easy to take this growth into account; while the length and breadth of the head, the length of the fingers, of the hand, of the foot, of the forearm, and of the ear are unchangeable, whatever may be the development of muscle or of adipose tissue.

The measurements that have been mentioned have been made on the 120,000 subjects that have passed through the Paris prisons during the past ten years, and copied on as many bits of cardboard, which are filed away in pigeon holes. The principal features of the method adopted for the classification of this enormous mass of measurements are as follows: The cards containing descriptions of men are placed on one side; those of women on the other. The latter are much less numerous than the former, not exceeding 20,000. From the 100,000 masculine descriptions that remain, about 10,000 must be separated, because they relate to minors and require special classification. The remaining 90,000 measurements of adults are first divided, according to the length of head, into three classes, as follows:

1. Division of short heads, comprising about 30,000 cards.

2. " medium " " " 30,000 "

3. " long " " 30,000 "

Total,..... 90,000 cards.

The measurements are correct within one millimeter, and experience has proved that it is possible, once for all, to fix the limits of the three classes in such manner that each shall always contain approximately the same number of cards. Each of these three great masses of 30,000 measurements is then redivided, without any more reference to the length of the head, into three groups based on the width of the head. These groups, nine in all, will, therefore, contain each about 10,000 cards. These subdivisions are themselves divided each into three groups, according to the length of the middle finger. Each of these last groups evidently contains only about 3,300 measurements. The length of the foot furnishes a fourth basis of division, by which each of the last-mentioned packets of cards is divided again into three groups of 1,100 each. Then come similar subdivisions based respectively on the length of the forearm, the height, the length of the little finger, and the color of the eye. The cards in these last groups, which contain only about 13 each, are arranged according to the length of the ear. Thus, thanks to six new anthropometric principles—those of sex, height, age, and color of the eyes having always figured in descriptions—the collection of 120,000 photographs in the Paris prefecture of police has been divided into groups containing a dozen pictures each.

Suppose, now, that we wish to find out whether a person who has just been arrested, and who says he has no criminal antece-

dents, has been previously measured and classified under a different name. An anthropometric measurement is first made. Then we seek, first, the primary division of eards corresponding to the length of head of the person measured; next the subdivision of this indicated by the width of his head; then the successive groups corresponding to the length of his middle finger, that of his foot, and that of his forearm. Thus, by a process of elimination, we arrive finally at the packet which ought to contain the measurement sought, if the man arrested has previously been convicted and measured. When one or several of the measurements taken fall on the dividing line between two groups, search has to be made in each, and followed out through all the successive branches of classification, exactly as one searches in a dictionary at different places for a word whose exact spelling escapes him. Comparison and discussion of the descriptions on the cards in any one of the final packets show that it is almost impossible to find two similar ones, so that the equivalence of the corresponding figures of two measurements constitutes almost a certainty of identity. Nevertheless, as in the pursuit of justice absolute certainty ought to be aimed at in all cases where it can be attained, anthropometric measurement, properly speaking, is always supplemented in practice by a descriptive identification, by noting the color of the eyes, hair, beard, and complexion; and by analyzing the contours of the profile, forehead, nose, lips, chin, and ear. The vague terms used on passports and permits have been replaced by a vocabulary that is clear, precise, brief, and above all orderly and classified. In fact, since police identification uses the same material as ethnologic description, the new science founded by Camper, Morton, Broca, and Virchow should serve us as a guide in our task. The old physiognomists, like Lavater and his imitators, pretended to compare the different forms of the human face to those of animals. In truth, there is not among the men of the white race an individual physiognomic characteristic that cannot be compared very simply with some similar but exaggerated form that is normal among one of the colored races—the red, the black, or the yellow. the police vocabulary of description ought to be a descendant, if not ethnologic, at least intellectual, of the vocabulary of ethnography. It has been necessary for us only to lower and to limit the methods of strict science, so as to adapt them to the use of the agents of the police, who are hardly in touch with the doctors of the Sorbonne. This descriptive part of our scheme of identification is replaced by photographs of the judicial type (face and profile side by side) whenever the necessities of the police or the magistracy render the preparation of a portrait desirable.

Finally, our cards of identification bear a third and last element of recognition—the record of particular marks. Every one bears, often unknown to himself, numerous external peculiarities of structure—pigmentary moles, or "grains of beauty," and the scars of cuts, boils, or wounds, not to speak of the tattooings so frequent among criminals. Three or four of these marks suffice to distinguish an individual from all other inhabitants of the earth, if they are described with anatomical precision; as, for example, "a vertical cicatrix in the middle of the back of the second of the phalanges of the left index finger"; or "a mole six centimeters to the left of the vertebral column, and fifteen centimeters below the seventh vertebra." Particular markings thus have an identifying power greater than that of measurements of the bony frame; they would even be called upon to replace these completely, were it not for the difficulty of properly classifying them. I should add that the entire process of identification as it has been described, with its three distinct parts, does not take more than from five to seven minutes for each subject, the measurer being aided by a secretary who writes at his dictation. Thus, four pairs of police officers suffice, at Paris, for the measurement, every morning between nine o'clock and noon, of from 100 to 150 men who were arrested the day before.

Let us now glance at the results obtained by this plan. Formerly the prefecture of police, to guard against concealments of identity, placed the recognition of habitual criminals on the footing of a kind of competitive contest. A prize of five francs was given to every police agent or prison official who recognized a criminal that was concealing his identity, and who could tell the prisoner's real name. In this way from 7,000 to 8,000 francs a year were paid out in exchange for the recognition of from 1,400 to 1,600 criminals. Nevertheless, in spite of the relative size of

these figures, the magistrates and the prison directors admitted that more than half of the habitual criminals arrested escaped recognition. A fortuitous circumstance sometimes furnished proof that the same malefactor had served sentences in the same prison three or four times under different names, without having been recognized. There were cited cases of "chevaux de retour" well known to the police, who, being wanted for grave crimes, could think of no better method of concealment than to commit some slight offense for the purpose of getting arrested and of hiding themselves in a prison under an assumed name.

The anthropometric method cut short all such expedients. Criminals have learned by experience that the time of assumed names is past; they have recourse to them no longer except in desperate cases where they are forced to hide their identity. Such, for example, was the case of B-, an habitual criminal who murdered his wife recently in Paris, and who succeeded in eluding the police for several days. Arrested at night by chance, among a crowd of vagabonds detained by the guardians of the peace, and taken to a police station, he thought it wise to hide under a false name; and he was about to be set at liberty, thanks to this trick, when the anthropometric classification system caused his old measurement, taken five years before under his real name, to rise before him like the ghost of Banquo. We may add to this instance those of many deserters, persons condemned by default, and escaped convicts, in whose cases the establishment of identity was proof positive of their crime, and who were unmasked by anthropometric measurement. This special service, which has been regularly in operation at Paris for more than seven years, has detected annually from 400 to 500 cases of this kind. Its establishment, strongly opposed at first, is now approved even by its former adversaries.

"I do not doubt," the reader will say, perhaps, "that anthropometric examination does detect a certain number of criminals. But how many succeed, as previously, in passing through the meshes? We see the sum of your successes; certainly they are incontestable, but who can tell whether it is not exceeded by the number of your failures?" Official documents permit me to give a categorical answer to this question. Errors in matters of

this kind may be of two sorts: 1, mistakes in identity; 2, failures to identify. Mistaken identity results from the confusion of two measurements which do not relate to the same person. It may thus be declared, for instance, that B—, here present, is identical with A—, who was arrested and measured five years ago; when in reality they are two distinct persons. Mr. Spearman, an English ex-magistrate, has collected numerous examples of this sort of judicial error that have occurred in England during the past four years. I do not hesitate to assert most emphatically that anthropometry protects us completely from such mistakes. It is necessary to recur, for the moment, to what has been said as to the threefold nature of our method. When, in the midst of a mass of 100,000 measurements, we find a record presenting identically the same figures as that of the subject who is under examination, a mathematical mind may object with justice that the concordance of the figures is not a sufficiently convincing proof of identity, since the method of classification has precisely for its aim the grouping and bringing to light of similar records of measurement. But when, on this old card, selected from 100,000, we find in addition a concordant personal description, the probability of identity is wonderfully increased, and it changes to absolute certainty when we read on the back of this very card the record of all the bodily marks that are observed on the subject under examination.

"These three elements of recognition, evidently independent of each other—mensuration; description, or photography of the face and profile; and the record of bodily markings—allow the determination of the identity of an individual, after an interval of several years, with such absolute certainty that the employees of the anthropometric service, when they discover the true name of a criminal who is concealing his identity, have orders not to make known to the latter the result of their search, but to inform directly the proper magistrates, who thus are in possession of the true character of the person before them, unknown to the latter. Of more than 3,000 reports made thus secretly up to this day, not one has given the opportunity for confusion that, otherwise, the protests of the accused before the police justices would have immediately caused."\*

This should not be interpreted to mean that habitual criminals do not often try to protest against the names that anthropometry

<sup>\* &</sup>quot;L'Annuaire Statistique de la Ville de Paris," 1889.

fastens on them; they often protest for months, but unfailingly, hitherto, the exactitude of the anthropometric identifications has been confirmed by the final decisions of the courts. Not a single mistake has been proved, and I may add that I cannot imagine how the legitimacy of our assumptions can be questioned.

Failures to identify correspond to quite another order of facts. Among the 100 persons who pass each day through the process of measurement, what is the number of those who are not unmasked at once, and who are recognized later either by the aid of the old methods or by chance? No point is more interesting to discuss in order to bring out the efficacy of the new method. Official statistics of the city of Paris give us, in regard to this point also, an exact response. The prefectorial administration decided, at the time when it adopted the anthropometric system, that the prizes to be given for the recognition of criminals that the system failed to identify should be doubled, and that they should be deducted, in future, from the salaries of the anthropometric agents. These latter are, then, pecuniarily interested in the good application of the system, since each neglect on their part may result in a fine of ten francs. On the other hand, when a prison official, a clerk, or any subaltern recognizes among the prisoners a former "boarder," under a false name, we may be quite sure that he will not fail to inform his superiors at once, in order to obtain the prize.

As each lapse of the system is thus certainly registered, it is impossible for the interested officials to conceal a mistake. "L'Annuaire Statistique" for 1889 tells us that, among a total of more than 30,000 subjects examined during the year, the number of failures to identify was only four. This leaves little to be desired. When the primary causes of these four failures are sought, it is seen that the fault was not in the system, but rather in human fallibility. One morning, for instance, the unfinished searches of the day before were left incomplete, and at other times there were gross blunders in dictating or writing figures. The probability of being recognized at once by being "bertilloné" is thus equivalent to certainty, as far as it is possible for anything human to approach this ideal.

One of the curious consequences of the infallibility of anthro-

pometry is the almost complete disappearance of international pickpockets from Paris. Eight years ago, 100 of them were arrested there yearly; by 1887, the number had fallen to 34; it did not exceed a dozen during the past year. Being satisfied that it has become impossible for them to hide their antecedents in case of arrest, and fearing also the increase of punishment inflicted on habitual criminals and on those who have disobeyed a decree of expulsion, they prefer now to remain, of their own accord, in foreign capitals. "We have our choice," they say; "we are not bound to our native soil by ignorance of foreign languages. If we hesitate between two fields of labor—the one at Paris during the opening of the Exposition, the other at London during a regatta, the difference of punishment in case of accident will suffice to turn us from your capital; pray excuse us!" These remarks, which were made to me in 1887 by the leader of a gang, have been repeated several times. After a little incredulity on the part of some of the police authorities, the fact of the disappearance of pickpockets and the truth of the explanation that I give of it, have been confirmed officially, notably by M. Goron, the present chief of the Service de la Sureté at Paris.

My country will not long enjoy its immunity alone, for anthropometry is being adopted rapidly by other nations. Belgium and Russia introduced it officially several years ago, and are quite satisfied with it. The Federal Minister of Justice of Switzerland has recently sent a circular to the cantons to induce them to do the same, and I know from an authoritative source that the adoption of the system is already assured in the chief cities, such as Berne, Zurich, and Geneva. Vienna, Berlin, and Rome are now trying it in their prisons. England alone has held back, in spite of the efforts of certain members of Parliament. But I have just learned that a bill giving to the police the legal power to measure criminals according to the Bertillon system has been recently introduced in the House of Commons.

So our poor international thieves are seeing all European countries successively closed to them. Will they be forced to cross the ocean, to take refuge in America? There also they will find something to talk about, for judicial anthropometry has been put into practice by legislative enactment in several

States of the Union, and seems to be working its way toward general adoption in the United States and Canada. The National Prison Association of America even advocated it in 1887, several years before it came into general use in Europe. Among the republics of South America, Uruguay, Paraguay, and certain provinces of Brazil have adopted it and are applying it, judging from official documents that have reached me. Yet a few years and our interesting clients will have no other refuge than China; already they will do well not to embark for Japan, which has been using the system for several years.

I may answer, in conclusion, an objection that reached me from New York, through the medium of the press, several years ago. "We cannot understand," it ran, "in what respect your system should interest our police, since it facilitates in no respect the arrest of malefactors on the public road." Certainly anthropometry, considered in itself, is exclusively a penitentiary formality, whose power cannot be exercised till after arrest; but we should not forget that it is reinforced by a descriptive record, which differs in no respect but that of greater precision from the old method of identification in use by the police. It may be said, . borrowing the language of the mathematicians, that the role of anthropometry is the reciprocal of that of description. In the old method we have a single description, which must be compared with each of the 100,000 free individuals of a city; in the new method we have a single individual, who must be compared with each of the 100,000 anthropometric measurements on our records. Anthropometry finds the name, the person being given; description finds the person, the name being given, with its corresponding marks of identity.

The new method, in imposing on its agents a rigorous vocabulary, has created what may be called "the portrait in words." Under the influence of this school, those least prepared have become physiognomists, and their perception for police purposes has been made doubly strong. M. Lozé, prefect of police, and M. Goron, chief of the Service de la Sureté, have understood this so well that they have finally decided that, instead of attaching special agents to the anthropometric bureau, all their inspectors

shall receive anthropometric instruction.

If we look at things from a comprehensive point of view, everything in police matters is an affair of identification. A crime has been committed by an unknown man. The task of the police consists: 1, in discovering the individuality of the guilty man; 2, in finding him for the purpose of arresting him, that is, in individualizing him in the midst of the mass of human beings. From the beginning to the end of the judicial inquiry, the only questions are those of identity and of description, which are to be solved by taking as a basis the elements of evidence. Vague and deceitful as these are, the new method throws some light on them. Here is a preliminary step toward a scientific police method, in which the technical knowledge of "la chasse à l'homme" shall be co-ordinated. Up to the present time, in this matter, all has been left to instinct, that is to say, to routine. The professional instruction of the police has been extremely limited. With reference to legal knowledge the police will be always on a footing of inferiority in comparison with the department of justice, which has studied the law and knows it thoroughly. But what a difference there is when we pass to its application! The courts, properly speaking, are not expected to execute that which the law commands, but all the means of so doing are at the disposal of the police; they have need only to know the limits which the law forbids us to pass.

Nothing, then, prevents the police from setting out in their turn on the road of scientific application, which characterizes the closing years of this century. Anthropology, by definition, is nothing but the natural history of man. Have not hunters in all times been interested in natural history? And, on the other hand, have not naturalists something of the hunter in them? No doubt the police of the future will apply to their particular form of the chase the rules of anthropology and psychology, just as the engineers of our locomotives are putting in practice the laws of mechanics and thermodynamics.

ALPHONSE BERTILLON.

### OUR SERVILITY IN LITERATURE.

Considering that our national institutions are based upon a high humanitarian ideal, seemingly calculated to inspire an almost religious enthusiasm, and that they are the creation and property of the whole people, we are prepared to find them the objects of the tenderest reverence and solicitude. That, in countries where all power is in the hands of an individual or a class, and the body of the people are owned rather than own, there should be little or none of this reverence, is most natural; but that there should be any lack of it among our people, any tendency to treat the laws with disrespect, is almost astonishing. And yet such disrespect is very general, if not in words at least in practice. Though, from temperament and for material reasons, strongly averse to revolutions, we are, as a people, singularly lacking in patriotism of the genuine sort, in that enthusiastic loyalty which our country deserves, and which is often felt for her institutions by intelligent foreigners.

The lack of patriotism among Americans displays itself, not merely in disrespect for the laws, and in a willingness to break them when they happen to be inconvenient, but also, and to a far greater extent, in matters with which the laws do not presume to deal; in the sphere of morals, as distinguished from that of legality. Very many persons having sufficient patriotism not to violate a positive law, do not hesitate to be thoroughly and systematically unpatriotic in matters beyond the reach of such True patriotism imposes this as a duty upon every citizen: that he shall make the fundamental principles of his country's institutions determining factors in all the actions of his life; that he shall neither say nor do anything contrary to these principles, anything calculated to lessen their effectiveness on the life of the nation. How rarely is this duty felt, even among that minority of our citizens who by education are fitted to understand our institutions and their high purpose! It is a pitiful

fact that the free spirit of our Declaration of Independence has not yet, in any great measure, entered, as an informing principle, into the life of our people. While professedly representing a new epoch in the history of human freedom and civilization, we are still content to follow, in thought and life, the servile and semi-barbarous ideals of past epochs. In no one department of our activity—politics, business, education, religion, art, thought, or literature—has the spirit of American freedom been able to assert itself. Though we boast that we have freed ourselves from the tyrannies of Europe, we are still their bond slaves in all save name. "Captive Greece took captive her rude conqueror," said Horace. So vanquished Europe still rules her vanquisher, America. Ay, and Europe, with good reason, despises us for submitting to her rule.

In no direction, perhaps, is our unworthy and unpatriotic dependence upon Europe more marked, and in none, certainly, is it more pervasively hurtful, than in that of literature. With the works of Emerson, Lowell, Whittier, Hawthorne, Cable, and others before us, it would, of course, be unjust to say that we have no such thing as a national literature. At the same time, no one who understands that a national literature must be an embodiment of the national ideal, will affirm that ours is extensive. Although hardly any other country produces more of what is called literature than the United States, yet very little of what we produce is, in any distinctive sense, American. And worse than this, our home literature is almost overwhelmed in a flood of foreign, un-American productions, which inundate our book markets. The obvious result of this is, that the literature thrown broadcast over our land, and read by the great body of our citizens, young and old, educated and uneducated, is un-American in tone, temper, and ideal, and has a distinct tendency to undermine and destroy all true patriotism among our people.

For this condition of things four distinct classes of persons are to blame: First, the reading public, which has so little love for the national ideal as to crave unpatriotic literature; second, our literary men and women, who so far forget themselves as to pander to this servile craving; third, our publishers, who, for mere love of gain, have been willing to corrupt their countrymen

with unmanly literature; and, fourth, our literary critics, who hold themselves and their function as educators so cheap as to allow all this to go on without raising their voices against it.

As to the reading public, it may be said, by way of excuse, that its members, for the most part, do not realize either the extent to which they are influenced by what they read, or the hurtful nature of much of the literature supplied to them. They are very largely in the hands of authors, publishers, and critics, who set the fashion in literature, pretty much as tailors and modistes do in dress. The one changes almost as frequently as the other, and as capriciously. All the more ought these three classes, the dispensers of literature, to recognize the importance of the part they are called upon to play in the education of their coun-

trymen, and to perform that part conscientiously.

As to American authors, it is but fair to say that few, if any, of them manifest any intention of discouraging patriotism by their writings; while some, and these by far the greatest, are most nobly patriotic. When our authors err, it is mostly from ignorance or from the imitation of foreign models. It ought to be frankly admitted that the majority of our literary men and women, as well as of our artists, are persons of very ordinary intelligence and education, whom a desire for social success, or the inability to pursue any productive calling, has turned to story-telling or verse-forging. That such persons should have any higher purpose than to pander to the taste of the thoughtless multitude, or any power to produce anything valuable or enduring, is not to be expected. Since the long-needed copyright law has been enacted, although it is premature to guess even how far it will contribute to exclude the more undesirable kinds of foreign popular literature from our markets, it certainly ought, by securing to American authors their lawful rights in their works in England and the English colonies, to induce a superior class of men and women to enter the paths of literature in this country. But even authors who deserve to be called literary people are often lamentably ignorant of the character of that literature which our country demands, and which a genuine patriotism would hasten to supply—a literature exhibiting the results of the American spirit in all the departments of thought and life. Very

many of them not only prefer foreign subjects (which are entirely allowable, if treated in the American spirit,) but also treat all their subjects from a foreign point of view, presenting as valid and binding many notions and conventions which our nation, by the very fact of its existence, utterly repudiates, and which can only tend to obliterate the American ideal in the hearts and minds of our people. In saying this, I must not be understood to advocate any Know-nothingism in literature, any narrow, supercilious insularity, such as so frequently pervades English literary works. Our literature ought to be broad, cosmopolitan, sympathetic; but just for that reason it ought to be American in spirit, and not Chinese, Hindoo, German, French, or English. There is no reason why it should not deal with any form of human thought or life, provided it always deal with it from the American point of view, which alone is truly cosmopolitan. At the same time, it argues a certain blindness to the poetic possibilities of American life, and a certain want of true patriotism, when an American author, instead of taking the subjects for his art from the life of his own people or the scenery of his own country, goes to look for them among the people and scenery of other lands. It ought to be one of his chief endeavors to idealize American life, to bring out its latent poetry; in a word, to throw around it that ennobling charm which Burns and Scott threw around the life of the Scottish people. No more patriotic service can any American perform for his country today than this. And this life of ours, in spite of all its outward frivolity, selfishness, and materialism, contains numerous elements of genuine poetry, which it needs but a true literary artist to bring out and make glorious forever. If truth and reality be the basis of all noble art, literary and other, then no life ever offered greater possibilities for art than our life offers to-day. For, however conventional we may, in our obliviousness, allow ourselves to become in actual practice, the underlying ideals of our lives are still simplicity, genuineness, intrinsic, incommunicable worth. What more can a serious artist desire? How much grander and more poetical is the spectacle of a human being quietly and persistently striving to be simply noble in his own person and right, than that of one struggling to obtain lands,

honors, titles, or even conjugal happiness! And yet how blind are most of our literary men and women to this fact! How few literary works in our country have subjects turning upon what is, after all, the pivot of all true human life at any time!

But, if much of the literature produced by native Americans is foreign and unpatriotic in spirit, that mass of really foreign literature which, in cheap reprints, has threatened to drive our native products from the market, is still more so. A great deal has been spoken and written against these reprints on the score of the dishonesty involved in them, and with good reason; but they deserve far more and far stronger reprobation on other grounds. Even if the authors' copyright had been, in all cases, duly regarded, they ought still, in the majority of cases, to be protested against, as tending to corrupt our people and to draw them away from that simple ideal of life and freedom which is the very soul of our nation. I am here referring not solely or chiefly to reproductions of those unclean works with which France favors us, or of that vapid, sentimental Damen-literatur in which Germany abounds, but rather, and especially, to those innumerable reprints of English works of unexceptionable conventional morality with which the whole country is deluged. Against French immorality we are, in some degree, protected by our native puritanism, and where that fails, by conventional hypocrisy; while German sentimentality, lacking, as it usually does, the salt of humor, strikes us as insipid, and therefore lays but slight hold upon us. In English works, on the other hand, there is something far more germane to our character, a subtle atavistic poison, which puts to sleep the new man, the free American, in us, and wakes the slumbering servile or overbearing Englishman. Still more frequently it wakes the slumbering Englishwoman. However useful such literature may be in England, which is dominated by the spirit of caste, rendering necessary the cultivation of servility in one class to match the arrogance of another, it is distinctly hurtful in America, where there is no recognized caste, and where nothing is more essential to public and private well-being than the spirit of manly and womanly self-respect, and of contempt for all factitious worth conferred by birth, position, title, or wealth.

Aristotle long ago made this wise observation: "Every form of government must be matched by a corresponding education; for it is only when the body of the people preserve those characteristics which originally determined their form of government that that form can maintain itself. For example, the persistence of democracy depends upon the persistence of the democratic spirit." Now, our government is, in theory and ideal, a democracy, and owes its origin to the democratic spirit. If it is to be maintained, the democratic spirit must be carefully cultivated, and this can be done only by education.

When we use the term "education," we are apt to think only of that instruction which is imparted in schools and colleges. But of the education which preserves a political or social spirit, only a very small portion is given or received in such institutions. The main part of it is, at the present day, derived from reading; and as the great body of our people read only the cheap current literature, that literature must be regarded as the chief agent in the preservation or destruction of the democratic spirit among us, and, hence, of our form of government. If the literature which the people habitually read be democratic and independent in tone, the spirit of democracy, and democracy itself, will be preserved; not otherwise. Now, the essential elements in the democratic spirit are a willingness to acknowledge and respect the dignity of humanity in every human being, an appreciation of all genuine worth, wheresoever and in whomsoever it may appear, and an abhorrence of all social distinctions and privileges conferred otherwise than by personal merit. democratic spirit detests not only the man who exploits another for his own ends, and the man who pusillanimously allows himself to be so exploited, but also the man who arrogantly claims precedence of, or respect from, another on any ground but that of personal character, and the man who servilely admits such claim. If, then, the true democratic spirit is to be kept alive among our people, it must evidently be embodied in, and give tone to, that literature by which the mass of them are educated and by which their political and social leanings are determined.

Thousands of American young men, of fair education and excellent possibilities, captivated by the pictures of English aris-

toeratie life drawn in English novels, are learning to despise the simple, rational, useful life of the worthy American citizen, and to court consideration and vulgar popularity by adopting the habits, and leading the useless lives, of English lords. As is usual in such cases, the copy is a caricature of the original. The untitled American lord proves usually to be a vulgar creature, having to assert his self-conferred lordship by all that is most unattractive, most inhumane, and most un-American—and it is a good deal—in the English aristocrat. In England, aristocracy has no need to display or to obtrude itself; in America it can exist only by display and obtrusion. For this reason the American would-be nobleman must necessarily court attention and try to strike the vulgar imagination by the mere accidentals of aristocracy, such as any boorish Dives can command—houses, horses, turn-outs, yachts, opera boxes, and the like. And the vulgar are impressed by such things, bow down in servile reverence before them, and do their best to make a similar display.

If the effect of English popular literature upon the young men of America is injurious, rendering them unpatriotic and contemptible, its effect upon the young women is even more so. The extent of this injury it would be almost impossible to overestimate. For many of them the novel-drawn pictures of English social life, wherein every one bows down to birth and title, and lords and high-born ladies are spoken of as if they were divinities whose recognition and favor were the chief prizes of life, are utterly demoralizing, inspiring them with an impatient contempt for the simplicity of American society, in which personal worth and charm can make them queens, and with a longing to enter, even as humble suppliants, the enchanted circle where birth and title rule, and where personal worth hides behind a mask. Women thus demoralized become utterly unfit to be American wives and mothers. Their chief effort is to shape their lives on the English model; if they are poor, toadying to the rich and would-be aristocratic; if they are rich, playing the arrogant English duchess to the best of their ability. Not a few of them even render themselves contemptible to men and gods, by toadying or buving (at what a price sometimes!) their way into English aristocratic circles, by shivering attendance for hours at royal

receptions, in order to do obeisance to what their country has nobly repudiated; or, worse than all, by buying husbands, renouncing their birthright of freedom and equality with the best, and sinking down into subjects, liable to be called on to act as "ladies in waiting," that is, as chambermaids. If all the sacrifices which degenerate American fathers and mothers have made to buy titled husbands for their daughters were recorded, they would form a revelation so ignominious that it would not be believed; and, after such a revelation, patriotic Americans would hardly dare to look foreigners in the face. But even without such a revelation the conduct of many of our countrywomen abroad, and especially in England, is enough to make every self-respecting American hide his head for shame.

These are but a very few of the sad results due to the dissemination of English popular literature, especially novels, among our people. It would be only too easy to add indefinitely to their number.

In order to rouse public indignation, we require a new race of literary critics, honest, fearless, independent, inspired with profound loyalty to American ideals, thoroughly acquainted with the literary needs of their country, and resolute in their purpose to discredit and put down all literature that threatens to corrupt the spirit of democracy and humanity. When these come to the front, publishers and authors will learn that they cannot be permitted to demoralize the American people with sub-humane, undemocratic, servile literature, whether of foreign or of native manufacture, and that our country imperiously demands a literature embodying its spirit and calculated to educate the whole body of the people up to its ideal. Then, and only then, shall we be truly patriotic at heart. Then, and only then, will the democratic spirit be fostered, and democracy be safe.

THOMAS DAVIDSON.

# FINANCIAL.

#### FREE SILVER COINAGE-WHY NOT?

The government rightly assumes the function of coinage in order to give absolute assurance that each coin contains a certain quantity of gold measured by weight in grains, or a certain quantity of silver measured by weight in grains. A little alloy is added to harden the coin. If people who own silver bullion bring it to the mint and ask to have it coined into pieces of metal named "dollars," why should not the silver be coined into silver dollars? If other people bring gold bullion to the mint and wish to have it coined into dollars or multiples of dollars made of gold, why should the bullion not be coined into gold dollars? There is no reason why as many round pieces of silver called "dollars" should not be stamped by the government as any one wants; there is no reason why as many round pieces of gold called "dollars," or "eagles," or something else, should not be coined as any one wants.

The danger of free coinage is not in the free coinage itself. All that is needed to make free coinage safe, and to enable the mints of the government to supply all the dollars of either kind that any one is willing to buy with bullion, is a slight amendment in the act of legal tender.

The value of gold and of silver in the markets of the world is a matter that it is wholly without the power of the government to control or to regulate. The value of the silver in the silver dollar has ranged lately from seventy-six to eighty cents in gold. If the law enables any person who has made a bargain to pay dollars, to pay either in silver dollars or in gold dollars at his own choice, without giving the creditor the same choice, then any one can cheat the man whom he employs or the man to whom he owes money, by availing himself of a law under which any one to whom dollars are owed is forced to take silver dollars whether he wants them or not, or whether he has agreed to take them or not.

Amend this act so that it shall correspond to the laws and the customs relating to pounds-weight. Bargains are made every day to buy and sell so many pounds of cotton, wool, hides, and every other kind of useful goods, except gold and silver bullion. The law says that any man who sells a pound shall deliver a pound avoirdupois of seven thousand grains, unless he has agreed to sell gold or silver bullion. If the bargain relates to bullion, the seller can deliver troy pounds of fifty-seven hundred and sixty grains. But the law does not require the kind of pound to be named in every bargain and sale, either of goods or of

bullion. It is not necessary to name the kind of dollar in every bargain or sale. Amend the legal tender act so that any man who has promised to pay simple "dollars" for anything except gold or silver bullion, without any other word describing the kind, shall be under the obligation to pay dollars of gold; but also permit him to make his bargains for any kind of goods in silver dollars, provided he says or names silver; then the free coinage of either kind of dollars will be perfectly safe. All can then have all the dollars that they want, of either kind, that they can afford to pay for. Why not?

There is no international act of legal tender. If any one contracts to buy goods and to pay in pounds sterling in London, he must pay in gold or fail. There is not even any coin named "pound sterling." The coin which corresponds to the weight of gold designated "pound sterling" is called a sovereign; that is its lawful name. Conversely, any man who sells corn, or cotton, or wheat, or beef, on a contract to be paid in pounds sterling, can collect his debt in gold. No act of legal tender can deprive either the purchaser or the seller of his rights.

Gold is the standard of the world's commerce. We cannot cut ourselves away from it if we would, and we would not if we could, because it is the safest and surest standard that we can tie up to. The price of the entire crop of wheat and grain, and of everything else that our farmers produce in excess of our own wants, is fixed at the gold standard by what the surplus will sell for in the home market for export. That price of the surplus establishes the price of the whole crop; on matter what kind of money may be legal tender in the United States—whether it be silver dollars worth eighty cents, depreciated notes or what-not—what the farmer gets is, and always will be, just what his crop is worth in gold.

If the free coinage of silver dollars were authorized without a change in the act of legal tender, there is no class of men who would be so badly cheated, or, in the vernacular, "so badly sold," as the farmers who are said to want it. The farmers are beginning to find this out, and it will not be very long before those who advocate the free coinage of silver dollars without a change in the legal tender act, will find themselves so feeble, in number and in every other sense, that they will not count for much in either influence or votes.

This may not be the kind of free coinage that the owners of the silver mines want; it may not be the kind of free coinage that men want who desire to pay their debts at a discount. Is it not the only kind of free coinage and the only act of legal tender that any honest man can advocate or sustain?

EDWARD ATKINSON.



# The Forum.

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### VON MOLTKE AND FUTURE WARFARE.

WAR is wont to be associated with the physical rather than the intellectual or moral qualities. The idea of youth and strength and ardor is coupled with the military profession. Alexander at the Granicus, Scipio at Zama, Napoleon in '96, McClellan in '62, represent to the popular fancy the typical soldier. But war, from the standpoint of the captain, is primarily an intellectual process. The successful conduct of a campaign requires, first, exceptional mental powers; next, moral qualities of high order; and, last, a physique to withstand the drain of unremitting mental and nervous tension. The gladiatorial courage which prompted the little Roman legionary to close in upon the burly Teuton with the sword, or the prize-fighting pluck which carried the Guards through the day at Waterloo, are not as essential to the captain as the moral force which on the broad strategic field helps him to push his own scheme home despite the threatening maneuvers of his opponent, which on the narrower field of battle enables him to risk the lives of thousands of his men upon the result of a calculation, or to watch with equipoise the compromising movements of his adversary, or to hold back his battalions for the supreme moment; are not as essential as that self-reliance which prompts him to great undertakings and sustains him through their performance.

Though there have been notable examples of great achievement by men under middle age, they are rather the exception than the rule. The most brilliant work is not usually done early in life. Alexander destroyed the Persian Empire at twenty-six; but Hannibal was in the forties when he held head against Fabius, Marcellus, and Nero; Cæsar was in the fifties when he defeated Pompey and his lieutenants; and Frederick was of equal age at the close of the Seven Years' War. Intellectual activity in peace is sometimes exhibited at an age which saps the physical powers to the core. But this is not the power called for by the kaleidoscopic changes of the drama of war. While the greatest military feats have as a rule been performed in middle life, it is rare that strength—mental, moral, and physical-is preserved to the biblical limit of years; and in military annals there is perhaps no one who has shown the ability to handle vast problems, to conceive and execute perplexing operations, to so great an age as the distinguished German captain who has recently passed from among us.

Helmuth Karl Bernhard von Moltke was born in the first year of the century which was to make Prussia a great power and to erect upon a sound pedestal the structure of the German Empire. His father had been in the Prussian army, but when the pride of Frederick's kingdom was humbled at Jena, he had entered the service of Denmark. Helmuth's youth was one of poverty. Without the assistance of the government he could not have accomplished his studies at the Copenhagen Military Academy, and his genius might have been lost to arms. At the age of twenty-two von-Moltke entered the service of Prussia, and ten years later he was assigned to the general staff with rank of first lieutenant. Here he remained, affording the spectacle, natural enough to the student of war but strange to him who associates war only with the clash of arms, of a man who never commanded troops, was never in a great battle until past sixty, who devoted himself solely to the administrative part of the profession, and yet who became one of the greatest strategists of modern times, and is perhaps the father of the coming system of war. From 1835 to 1839 von Moltke was given leave to serve in Turkey, where the army was being reorganized on a Prussian

basis. During this period he exhibited great engineering and administrative talent and wrote a volume on oriental matters which is still an authority.

For many years succeeding the desolation of the Napoleonic wars, the nations of Europe lay fallow to recuperate from the drain to which, for either attack or defense, the great Corsican had put the entire civilized world. During all this time, which covered the period of Moltke's life from early manhood well into middle age, the Prussian staff officer was unremitting in his labors. He had become an adept in all the details of his profession, had assimilated the lessons of history, had utilized in arms the modern talent for invention, had mastered the language of every country of Europe and learned its capacity for war; and though at forty-two he was only a major of the general staff, he was known as one of the most accomplished men of the Prussian service. Still no one gave him credit for the wonderful resources that he was to be called on to display at a period of life when in our army an officer has long been retired for age.

In 1845 von Moltke had the opportunity of going to Italy on the staff of Prince Henry, who resided in Rome for several years, but on the death of the prince he returned to his former duties. In 1858 his abilities finally earned him the position he had honestly won. He was made chief of the grand general staff, and a year later he was promoted to be lieutenant-general. What he has done as such is the history of the man, of Prussia, and of Germany.

Field Marshal von Moltke was of slender build and appeared taller than he really was. Unlike the heavily-muscled Teuton, he more nearly resembled an American Anglo-Saxon—spare, but active and alert and of great endurance. His habits were simple, his dress was plain, his manners were quiet and reserved. He was "silent in seven languages." Nothing could excite him or throw him off his equipoise. Of the numerous decorations conferred upon him, he habitually wore only the Iron Cross. His habits were methodical, and he was able to apply himself continuously for a great number of hours. No man was ever more familiar with every detail of the service than he. His one work in life was to make the Prussian army perfect as a fighting

machine, and every study, all accumulated knowledge, tended to this end. He was married in 1843, and his happiness centered in his home life until his wife died in 1868. He then sought labor as a relief from sorrow, and the result of his retirement was shown in the mobilization of 1870.

Moltke was the legitimate successor of Scharnhorst and Gneisenau. The astonishing victories of Frederick and the efficient army he left behind him were mainly due to the genius of this "Last of the Kings." The splendid army inherited from his father had been ground into powder during the Seven Years' War. What he left was not a Prussian army, but an aggregation of all nationalities organized and disciplined to an exceptional state of effectiveness. When the lamp of Frederick's genius went out, the army was left in darkness, and it was speedily disintegrated. Half a generation later the national movement of France gave the world the keynote of the modern system of war; Bonaparte appeared and carried it forward to perfection, and at Jena showed the world that Frederick's army without Frederick, albeit governed by his rules, was powerless against the mighty blows of a new genius backed by a people in arms. After repeated disasters, the Treaty of Tilsit limited the army of Prussia to 42,000 men. But the bitter lesson proved of use. The great minister, Stein, began to evolve financial order from the wreck, and Scharnhorst conceived the system by which each recruit entered service for a short instead of a long enlistment, and, once made a soldier, was sent back to the plow or the counter, ready in case of need. The patriotism and homogeneity of the Prussian people, stung to the quick by humiliating defeats, admirably seconded this plan, and such men as Gneisenau and Clausewitz carried forward the work. In six years a complete transformation had been effected, and the Prus--sian armies, which in 1813-15 contributed to the overthrow of Napoleon, were national to the pith. Thenceforward the organization of the Prussian army ripened. Compulsory personal service of three years with the colors and further terms with the reserve and landwehr became and remained the law. To this day there has been no cessation of army discipline, and the campaigns of 1866 and 1870 show the legitimate outcome.

A genius in war can do much with raw recruits. Hannibal quickly molded new levies into the form of seasoned troops. Napoleon, with a rabble under lax discipline, by crisp strategic combinations achieved astonishing results. But the best general is handicapped with an army unfit to second him. Perfect appointments, organization, and discipline under the colors are more essential than ability in the commander. Better a perfect army with fair generals than an untrustworthy army led by a genius. You are sure of the one; not so of the other. work of the Prussian general staff was based on this fact. kings of Prussia have always kept the best of talent in high The four corner pillars of the Prussian structure which made one Germany possible were Kaiser Wilhelm, Otto von Bismarck, Theodor von Roon, and Helmuth von Moltke. All bent their energies toward the same end—to produce perfect tools with which to do the work which European jealousies were cutting out.

The unquestioned strategic ability of von Moltke was thus supplemented by the peerless army at his disposal. The Prussian officer has been the hardest-working man in his profession. He has drilled his men himself. He has become familiar with handling his command under all conditions apt to occur in actual war. Its personnel, armament, health, and efficiency are matters of every-day concern. There is a constant interchange between line and staff duty, so that the directing becomes associated with the fighting element. He has been prepared by constant study, lectures, maneuvers, and the application of theory to practice. In the field, every superior and staff officer, squadron and battery commander has special maps of the country he has to operate in. His independence has been fostered to the fullest extent. and his judgment is relied on to take advantage of every changing phase. The enlisted man is equally strong, and perhaps no army has ever placed in line so large a proportion of those "present for duty" as the Prussian. Details on extra or special duty are not permitted, and it is known with certainty how many men will appear in the fighting ranks of a regiment.

Under the watchful eye of von Moltke all the elements bearing on army efficiency were elaborated. The railroads and tele-

graph lines were public servants first, commercial ventures next. The artillery was thoroughly equipped. Every horse in the country was listed and liable to be taken for military duty; every man was subjected to some service and knew his place when called on. The infantry weapons were not only better than the enemy's, but there were plenty on hand. Without having to claim that the Prussian was a better man than the Austrian or the Frenchman, it may distinctly be claimed that he was a better soldier, if arms, equipment, drill, discipline, readiness, and an unusual sense of patriotism considered as well as physique. When war came, Moltke could report the number of men, horses, and guns which could be massed on any given point at a given moment, and could control the means of putting them there.

Such was the condition of the Prussian army in 1866. Von Moltke had borne his part in the preparation, and he was called on to direct the maneuvers of the Prussian columns. While he always deferred to the king, he was actually an autocrat. Let us see how he did his work.

The active army of Prussia was 335,000 strong. This could be increased to a war footing of 600,000. That of Austria was 384,000 men, capable of being raised to 700,000. In two weeks the Prussian mobilization was completed and the troops were on the frontier; the Austrian had begun much earlier, but the war was decided before the mobilization was as complete. The Prussian soldier was well educated, personally and as a soldier; the Austrian was ignorant and but half trained. The Prussian infantry carried the needle gun, and the batteries were mostly of breech loaders; the Austrian foot soldier was armed with the muzzle loader; the batteries were of the old pattern. Despite this the Austrian army was a splendid body.

The problem before Moltke was awkward. Prussia was not a compact territory. Westphalia and the Rhenish Provinces were separated from the rest of the kingdom by Hanover and Hesse-Cassel, allied to Austria. If Prussia advanced into Austrian territory, her rear was subject to attack. Saxony, likewise allied to Austria, was a salient thrust into the Prussian dominions from which the enemy could debouch at will on Berlin or Breslau. The plan of Moltke was comprehensive and simple—

to neutralize Hanover and Hesse-Cassel, and then to throw the entire body of Prussian troops on the Austrian army in its own territory.

The main Prussian army of about 225,000 men was in three grand columns. The army of the Elbe, under General von Bittenfeld, was massed at Torgau, covering Berlin. The First Army, under Prince Friedrich Karl, took post at Görlitz. The Second Army, under the Crown Prince, stood at Neisse, covering Breslau. The flank armies were over 150 miles apart, but the central one was designed to sustain either. Sufficient forces remained at home, and Generals von Manteuffel and von Falkenstein, from Altona and Minden respectively, threatened Hanover with a division each; while General von Beyer with a division stood at Wetzlau ready to invade Hesse-Cassel.

Confronting these armies stood the main Austrian line, about 240,000 strong, massed near Prag, Brünn, and Olmütz, ready to concentrate at any point selected. Saxony had 25,000 men, Bavaria 50,000, and at Frankfurt stood a mixed force 40,000 strong. Hanover and Hesse-Cassel had each mobilized its army, some 25,000 effectives, and stood on the defensive, ready to fall on the rear of the Prussian armies if the opportunity offered. Italy, allied to Prussia, called away some Austrian forces, but their operations do not concern us.

Napoleon's favorite plan of attack was to move upon his enemy in one mass on one line, so that when brought to battle he might outnumber him, and from such a direction that he might compromise him. The campaigns of Ulm and Jena illustrate this method. It is unquestionably the soundest theory, but there are circumstances which render the plan unavailable. In the present case uncertainty of where the Austrian blow might fall, the necessity of protecting Silesia on the east and Westphalia and Rhineland on the west, as well as the impossibility of moving so many army corps on one line over the roads then existing, forbade an operation in one mass and justified the division of forces. Moltke knew and relied on his superior speed, as well as his better armament, and felt that whatever the maneuvers, he could concentrate before the great battle which is the outcome of all strategic combinations should take place.

The Austrian general, Field Marshal von Benedek, an able and distinguished officer, had expected to gain the initiative and invade Prussia. He confessed himself no strategist, but felt confident of his powers on the battlefield. He utterly misjudged his adversary. He held cheap the bureau-working, silent, studious Prussian chief of staff. But bureau work had prepared the way for operations far too rapid for you Benedek. The speed of the Prussians was Napoleonic. War was declared June 15. The Prussian columns advanced like an avalanche. In two weeks Hanover was brought to the verge of ruin, her king was dethroned, and her army surrendered. Hesse-Cassel met a like fate, and the elector was taken prisoner. The rear of Prussia was free; her communications with Westphalia and Rhineland were open. At the same moment Saxony had been invaded by the army of the Elbe and the First Army. In three days Dresden was taken, the King fled, and before the end of the month of June, all Saxony was in Prussian control. A fortnight had sufficed to settle the minor problems of the war, to cut off Bavaria and the Frankfurt forces, and to put Prussia in possession of the salient of Saxony which had been so marked an advantage to her antagonist. The army of the Elbe and the First Army were now joined, under command of Prince Friedrich Karl.

We have here a manifestation of the basis of Moltke's success—preparation, precision. For years the quiet man had bent every energy to detail. He had devoted no time to show work; he cared naught for the outward parade of efficiency. He had made sure that what the army was on paper it was in effect; that every man and officer was ready, and knew his place and duty; that mobilization should mean actual assembly. Every uncertain element was eliminated. So far as lay within human power, the war had been reduced to a mathematical calculation. However sound his strategy, it was of less importance than readiness; however able his opponent, the initiative gained by the promptness of Prussia had placed him at a disadvantage. Moltke had won the first innings; the war was to be waged on the enemy's soil; the morale of the Prussians was high.

But the greater problem was far from solved. The Crown

Prince was separated by over 120 miles from Prince Friedrich Karl. This position had been a politico-military necessity; but apart the two bodies were in peril. How could they act in unison? If Benedek should only be delayed in his advance for a few days more, all would be well. Great captains always gauge their adversaries and adapt themselves to their probable action. Moltke knew he could move the faster, and relied on Benedek's natural and constrained slowness.

Prince Friedrich Karl was promptly advanced into Bohemia, and the Crown Prince was ordered from Silesia toward Gitschin, where the armies were to join. The battlefield was manifestly to be on Bohemian soil. To meet the Prussian lunge, Benedek slowly concentrated in the vicinity of the left bank of the Elbe, south-east from Königgrätz. He was thunderstruck at the turn affairs had taken. But he was a typical fighter and welcomed the approaching battle, for the result of which he had no fears. The two Prussian armies were still dangerously far apart. There was a chance for a Napoleon to interpose between them and beat them in detail; a Benedek could not do so. Moltke's idea on this subject was that Benedek had neither space nor speed enough to essay this bold game; that if he did so and attacked either army, the other would be able, by superior alertness, to take him in flank and rear.

A glance at the map of Bohemia will show that it is surrounded on north, west, and east by bold and rugged mountain chains. These were a difficulty to the Prussians and an advantage. Should they be defeated in the approaching battle, they had an excellent line of defense to fall back on, still on the enemy's territory. But meanwhile the Riesengebirge lay between their sundered armies.

The Crown Prince had before him a serious operation in crossing the mountains in the presence of Benedek's threatening and much larger force, but he did so successfully. To facilitate the operation, Prince Friedrich Karl was ordered to attack the Austrian left. There were isolated exchanges, almost rising to the dignity of general engagements, in which each side won some advantage, but Moltke's strategic plan was gradually nearing completion—the Prussian armies were fast approaching.

Meanwhile von Benedek was pluming himself on his interior position and planning to hold back one Prussian army while he annihilated the other. He was far too slow. The Prussian heeis were of more avail than their needle guns. Benedek had two chances. He could with a small force intrench the mountain passes against the Crown Prince, as the lessons of our civil war plainly taught him to do, and delay the latter's advance, while with the bulk of his force he fell upon Prince Friedrich Karl. Or he might demonstrate against the latter and destroy the Crown Prince as he slowly debouched from the mountains. But Moltke was fortunate in his enemies, as many a great captain has been; Benedek delayed his action.

The armies came into each other's presence at Königgrätz July 3. The Austrians had on the field 206,000 men and 770 guns. Prince Friedrich Karl had 124,000 men and 444 guns. The Crown Prince had 96,000 men and 348 guns, but he was not yet in touch. Could he come up? Two days sooner the Austrians could have had things their own way. Lest Benedek should detach sufficient force to hold head against the Crown Prince, Prince Friedrich Karl was ordered to force the fighting on the Austrian left, which he did with a will, but was able to make no impression. He was, in fact, roughly handled. But the stubborn work relieved the pressure on the Crown Prince. Like Blücher at Waterloo, the Crown Prince at the last moment came in on the Austrian right flank, the Austrians were defeated, and Moltke's strategy was made perfect by success.

A notable difference between the rival generals and their armies is shown in the orders and dispatches. Moltke gave broad directions in few words, and left specific action to the judgment of his well-trained generals. Benedek arrogated all power to himself; he relied solely on his own knowledge and judgment; he gave no discretion to his lieutenants.

Königgrätz decided the war. The success of the campaign of 1870 was predicated on the same element of preparation. The triumph of 1866 was far from relaxing Prussian watchfulness. It was not only kept up to the mark, but advanced in effectiveness. How the French could have supposed, as they did, that they were to have a walk-over, it is hard to imagine.

When, in 1870, Napoleon declared war, the Prussian mobilization was effected in twelve days, and a deluge swept over France. The events of this war are too fresh in all minds to need recapitulation. It was perfect preparation rather than superior generalship which decided the struggle.

That you Moltke struck the keynote of the warfare of the future is probable. Careful preparation has always been a characteristic of great captains. We are apt to think that genius overrides the precautions of every day, but the history of war proves that success is bred of forethought. Genius is more than the capacity for unlimited hard work, but the hard work is indispensable. Alexander inherited a matchless phalanx from Philip, but his scrupulous care of it and his just weighing of every factor was what made his handful victorious over hordes. Hannibal exhibited greater patience and skill in working up his plans than any other captain. Cæsar was sometimes careless, but good fortune saved him from himself, and for most of his campaigns he laboriously made ready. Gustavus Adolphus was the first of modern times to show method in preparation for war and to overlook no condition. Frederick, like Alexander, inherited an army, but he kept it up to the mark by incessant work. From him comes a distinct part of Moltke's inspiration. Napoleon's laborious preparations were as marked as his strategy was bold and original. The German chief of staff enunciated no new doctrine. But has carried out his system with more fidelity and brains than any other man of the century.

The French Revolution put a national army afoot, and the mercenaries of the last century disappeared. The Prussian army is more national still. It is the very marrow of the people that forms the rank and file. "Für Gott, König, und Vaterland!" is no vain battle-cry. The Prussian soldier is truly patriotic, and everything is done to foster the sentiment. His uniform is an honor, not a badge of servitude. However poor the officer, he is a very Lucifer for pride. Nor is this mere vanity. He knows, and he is encouraged to feel, that his is the most honorable of professions so long as he works earnestly and honorably at it; that he belongs to the most splendid army of modern days, and that in the army lies the true safety of the

country. This is an inheritance from Friedrich der Einzige, and it does not slacken. Moltke's rule was work, pride in the profession, patriotism; he ground this into the very souls of the Prussians. Germany has followed suit.

Such is the basis. The superstructure consists of making everything—modern invention, railroads, telegraph, private and public enterprises—subsidiary to the needs of the country. This has been done with a resolute intelligence never before equaled. Whether the efficiency of the German staff will suffer from the death of von Moltke cannot be said, but on it rests the integrity of the Teutonic Empire.

Perhaps the art of war has never been so enigmatical as it now is. It is the x of the problem of nations. Among the Greeks war was a simple affair. The phalanxes of Athens and Sparta marched out to battle, and by a sort of consensus a plain was selected where the two bodies fought, much as two champions would fight a duel, and the victor dictated terms. Epaminondas with his Theban phalanx beat the Spartans by a keen eye for tactics. Philip beat the Thebans with the Macedonian sarissa. Alexander, by an astonishing power of gauging his work, and unequaled strategic and tactical originality, headed Philip's army and conquered the world. The Roman legion worsted the phalanx; or rather the Roman citizen, organized into a national legion much as the Prussian is to-day, beat the phalanx of mercenaries to which Greece had degenerated. armies of Cæsar and Pompey were alike, save in reflecting the spirit of their leaders. After their day the art of war languished, to be revived by Gustavus. Upon him followed Frederick, who taught Europe how speed and resolution can enhance small numbers. And then, in some respects greatest of all, Napoleon taught the world the modern system. During all these eras war possessed a certain stability which only some great cataclysm, like the invention of gunpowder, could interrupt. The personal element weighed for much, as it always must. But a given result could with reasonable accuracy be predicted from given conditions. This is no longer so. War is the most inexact of sciences.

Naval warfare stands over a volcano. The race between

ordnance casting heavy projectiles at fabulous velocities, and armor-plated ships, has resulted in the building of unseaworthy floating fortresses, armed with guns which work their own ruin when fired, and defended by such weight of metal that, though theoretically flotative, they scarcely dare cross the ocean; indeed, cannot coal for so long a journey. A noted eccentric of the day once said that he preferred absence of body to presence of mind. It may be said that the light-armed cruiser with two or three efficient guns, which can steam more than twenty knots and get out of the way of danger—that is, can maneuver to advantage—is worth more than the first-rate iron-clad. The future naval battle will yield vast surprises and will result in enormous loss of life. The iron-clad which floats at the end of the next stubborn sea fight will be a paragon. On land matters are not quite so unpromising, but, owing to the fertility of invention, they are quite as perplexing. Arms of precision upset the calculations of the best tacticians; smokeless powder threatens to cripple all calculation. Preparation will remain the sheet-anchor of nations, but no soldier can tell what the next invention applicable to war may be or how it can be met; and the armament or drill of a million men cannot be changed or amended in a day. Money alone will not do it. To make ready for a campaign has always been one of the most complex of problems; the difficulties are to-day increased many fold.

No inventions, no changes in arms, can alter the maxims of strategy. These are immutable. Their use depends on the character of the captains. But tactics change with inventions in firearms. The maneuvers of the battlefield must depend upon the weapons of the enemy, upon the danger zones of his fire. From close order we have gone to open order, only to find that scattered groups are apt to weaken discipline; and to-day more than ever before we need morale and cohesiveness on the battlefield. That commander who, despite the fearful decimation of modern artillery and small arms, can keep his battalions the longest in heart, will win the day. The Old Dessauer's "Wenn Du nicht zurück gehst, so geht der Feind zurück!" still holds good. It is tactics reduced to its lowest terms. Many intelligent essays are published to prove this or the other system to be the one to

govern the maneuvers of the coming battlefield, but in truth no one knows or can argue out what is to be. A theory sound to-day is discarded to-morrow. But a few facts are patent. Reliance can be placed only on a strictly national army. That nation the breasts of whose citizens are bared for her defense with honest patriotism, and which has leaders who leave no stone unturned to keep abreast of the progress of war, will remain the strongest. No nation, in the present condition of armed expectancy which pervades Europe, will, by better arms or more recent inventions, be able to dispense with this foundation. The rule held good in the days of the burgess-soldier of Rome; it holds good now.

The losses in the next war will probably not be an increase over the losses of previous ones. Campaigns will be of weeks, not months, and sickness will not add its terrors to wounds and death. The proportion of men who perish will decrease; but there will be enormous losses in some commands. As at sea, where iron-clads will go to the bottom with all on board, so on land, battalions, brigades will be annihilated by the increased efficiency of the enemy's arms. But on the whole the loss of life will be lessened.

There is scarcely any theory of warfare in the future which may not be argued out from the peculiar existing conditions. But it is a sphinx riddle which has not yet been guessed. The work done by von Moltke is typical of what the needs of the future must be; the man himself is the type of the soldier of the future. The swashbuckler has gone for good, driven out by modern invention, as that ancient bully, the knight in armor, was driven out by gunpowder. In his place has come the intellectual, hard-working student of war. If the life of the great Prussian soldier teaches anything, it teaches us that war is no longer the province of the rough, but is the theater for intellect, moral courage, and honest patience. The lower forms of courage have ceased to have their old-time value. It is brain tissue and morale which will win in future wars.

THEODORE AYRAULT DODGE.

#### CHURCH AND CREED.

Church and creed were born together. The creed is essentially a confession of faith in Jesus Christ as the Messiah and Saviour of men. Peter may be said to have uttered the first Christian creed when he said: "Thou art the Christ, the son of the living God."\* On this account he was named by the Messiah the Rock of the Church. The first confessor was given the keys of the kingdom of heaven. The creed was at first that confession of faith in the Messiah which was necessary to Christian baptism and to participation in the supper of the Lord in the Church. The apostolic commission, "Go ye therefore and make disciples of all the nations, baptizing them into the name of the Father and of the Son and of the Holy Spirit," gave the outline of the Trinitarian creed: "I believe in the Father and the Son and the Holy Spirit."

So soon as the Church was organized and provision was made for the training of converts in preparation for the sacraments, this simple outline of the creed was enlarged, so as to embrace the essential doctrines of the Christian religion as conceived by the ancient Church. This enlargement of the creed was made independently in the different churches established in the provinces and cities of the Roman Empire; but gradually a consensus was attained, such as we find in the so-called Apostles' Creed and in the Nicene Creed, the latter differing from the former chiefly in that it was enlarged by the Council of Nice in 325 A.D. so as to exclude the Arians from the Church. We have to distinguish, in the Apostles' Creed, between the older form, in which there was a consensus, and the later additions to it; just as we have to distinguish between the original Nicene Creed of 325 and the Constantinopolitan Creed of 381 with the western additions. We shall arrange these in parallel columns, giving the later additions in brackets, but not attempting to

restore to their original form the clauses that have been transposed. The parentheses show the Latin additions.\*

Apostles' Creed.

- 1. I believe in God the Father Almighty [maker of heaven and earth.]
- 2. And in Jesus Christ, his only Son, our Lord;

- 3. Who was [conceived] by the Holy Ghost, born of the Virgin Mary;
- 4. [Suffered] under Pontius Pilate, was crucified, [dead], and buried;
- 5. [He descended into hades]; the third day he rose again from the dead;
- 6 He ascended into heaven, and sitteth on the right hand of [God] the Father [Almighty];
- 7. From thence he shall come to judge the quick and the dead.
- 8. And [I believe] in the Holy Ghost.

9. The holy [catholic] Church; [the communion of saints];

Nicene Creed.

- 1. We (I) believe in one God the Father Almighty, maker [of heaven and earth, and] of all things visible and invisible.
- 2. And in one Lord Jesus Christ, the [only begotten] Son of God, begotten of the Father [before all worlds;] (God of God); Light of Light, Very God of Very God, begotten, not made, being of one substance with the Father; by whom all things were made; (both in heaven and on earth).
- 3. Who, for us men, and for our salvation, came down [from heaven], and was incarnate [by the Holy Ghost of the Virgin Mary] and was made man;
- 4. He [was crucified for us under Pontius Pilate; and] suffered, [and was buried:]
- 5. And the third day he rose again [according to the Scriptures]
- 6. [And] ascended into heaven [and sitteth on the right hand of the Father.]
- 7. From thence he shall come [again, with glory] to judge the quick and the dead; [whose kingdom shall have no end.]
- 8. And (I believe) in the Holy Ghost, [the Lord and Giver of Life, who proceedeth from the Father (and the Son;) who with the Father and the Son together is worshiped and glorified; who spake by the prophets.]
- [9. (And I believe) in one holy catholic and apostolic church.]

<sup>\*</sup>See Schaff's "Creeds of Christendom," pp. 12 et seq.

Apostles' Creed.

10. The forgiveness of sins;

11. The resurrection of the body [flesh];

[12. And the life everlasting.]

Nicene Creed.

[10. We (I) acknowledge one baptism for the remission of sins.]

[11. And we (I) look for the resurrection of the dead;]

[12. And the life of the world to come.]

The damnatory clauses of the Nicene Creed I have not given. They ought never to have been used with the creed. They may be appropriate as the judgment of the council, but they are not proper in public worship.

These two primitive creeds have been taken into the liturgies of the Christian Church and are a part of the public worship of Christendom. The House of Bishops of the Protestant Episcopal Church in the United States and the Lambeth conference of the Bishops of the Church of England and her daughters did wisely when, in their plan for the reunion of Christendom, they proposed these two liturgical creeds—"the Apostles' Creed as the baptismal symbol, and the Nicene Creed as the sufficient statement of the Christian faith." It should be the aim of all Christians to rally about this position as the essential doctrinal basis of Christendom. I take no exception to any statements of these two creeds. Some of the later additions seem to me to express important doctrines. At the same time, it is my opinion that, if we could reduce these two creeds to their primitive form by striking out all the bracketed clauses, many minds would be relieved of difficulties in subscription and nothing essential to Christianity would be lost. They would still give "the sufficient statement of the Christian faith." These two creeds are suited to public worship in form and in substance. Their language is chaste and beautiful, they are devotional and easily become choral. The Christian world, with very few exceptions, heartily unite in them, and in their one harmonious faith realize the blessedness of "the communion of saints." The later creeds of the Church express division and schism. They set forth doctrinal variations which are of great importance in the science of theology, but which are not essential to Christian faith and life. The Creed of Chalcedon and the pseudo-Athanasian Creed are accepted by the great body of orthodox men in the Christian Church, but both of them have been severely criticised by devout and honored theologians. What they have added to the two ancient creeds has not tended to the harmony of Christendom.

The Church of Christ for 1,500 years lived and grew and accomplished its greatest triumphs, destroying the ancient religions, transforming the Greek, Roman, and oriental civilizations, winning the Celtic, Germanic, and Slavonic races to Christ, without any other creeds than these. But in the sixteenth century the throes of liberty and reformation divided the Church, and large numbers of creeds, catechisms, and confessions of faith were framed in order to define the differences and to emphasize the discord of Christendom. The Greek Church produced a number of confessions and catechisms to vindicate its orthodoxy over against Rome and Wittenberg. The Protestant churches set forth their faith in the Augsburg Confession and in national symbols. The Roman Catholic Church defined the orthodox faith in the canons and decrees of the Council of Trent. All variations of Protestantism also found expression in confessions of faith and in catechisms of various kinds. These modern symbolical documents differ greatly in form and character from the ancient creeds. 1. They are not so much creeds, expressing the real faith of the people of God, as systems of orthodox doctrine, to be taught by theologians. 2. They are not designed for the worship of the people and are therefore not in the liturgical form. They are for instruction in the class room; catechisms for children; larger catechisms for adults and confessions of faith for the ministry. 3. They do not set forth in plain terms the essential doctrines of Christianity, but in learned language they give a complete exposition of Christian doctrine or else a full statement of certain particular doctrines with regard to which there have been division and debate.

If it was necessary to organize the various Protestant national churches of northern Europe, it was also necessary that these churches should define their faith in symbolical books. This made it necessary also for the Roman Catholic Church to define its position at the Council of Trent. So also when the non-conforming churches separated from the national churches there was the same historic necessity for additional symbols of faith.

These symbolic books were designed for the most part as public expressions of the faith of the national churches or of the denominations using them. They were not ordinarily intended to bind the consciences of the people or even to compel the ministry to blind subscription to all their dogmatic statements. Subscription to creeds was forced on the ministry of the British churches by the authority of the state in the interests of civil order. It was not a natural evolution of Protestantism itself. It was rather an unwholesome check to the development of Protestantism, its doctrine and life. The symbolic books of Protestantism culminated, on the continent of Europe, in the Lutheran Form of Concord and in the Reformed Canons of Dort. The Form of Concord became a form of discord in the Lutheran churches. Dr. Schaff has well said:

"During the palmy period of Lutheran scholasticism, the Formula of Concord stood in high authority among Lutherans, and was even regarded as inspired. Its first centennial [1680] was celebrated with considerable enthusiasm. But at the close of another century it was dead and buried."\*

The Canons of Dort excluded Arminianism from the reformed churches, and made a division which has continued until the present time. Dr. Schaff says:

"The Canons of Dort have for Calvinism the same significance which the Formula of Concord has for Lutheranism; both betray a very high order of theological ability and care. Both are consistent and necessary developments. Both exerted a powerful and conserving influence in these churches. Both prepared the way for a dry scholasticism which runs into subtle abstractions, and resolves the living soul of divinity into a skeleton of formulas and distinctions. Both consolidated orthodoxy at the expense of freedom, sanctioned a narrow confessionalism, and widened the breach between the two branches of the Reformation." †

The Westminster Confession was later than the two scholastic symbols just mentioned. It was the fruit of the second Reformation in Great Britian, and as such full of life and vigor and thereby less scholastic than the Form of Concord and the Canons of Dort. But in some respects it is having a history similar to that of these two older symbols. As I have elsewhere said:

"It was a splendid plan to unite all parties in the three national churches of Great Britain about common symbols. But, unfortunately,

<sup>\* &</sup>quot;Creeds of Christendom," p. 336.

the king would not allow the Episcopal divines to attend, and the Assembly. with the Long Parliament, soon expelled the Episcopal party. The Presbyterian majority was intolerant toward the Congregational minority, so that, while the dissenting brethren struggled heroically for their views in the Assembly, the hostility of the Presbyterian party became so great that John Goodwin and Henry Burton, the only two pastors of London churches who were Independents, were deprived of their charges. And so the Westminster Symbols became the banners of the Presbyterian party. What, then, do we see at the present time? The Westminster Confession has been rejected by all of the historical churches of England. It is held only by the Presbyterian church of England, a small church composed chiefly of Scottish and Irish families residing in England. In Ireland, it is the symbol only of the Presbyterians of the North. It is a national creed in Scotland alone. It is used only by Presbyterians in America and the colonies. Nine tenths of the Protestants of Great Britain and America do not adhere to the Westminster Confession. It has failed in its design of displacing the Thirty-nine Articles. It has not become the one creed of Great Britain. This is the verdict of history on the Westminster Confession." \*

The movement for a revision of the Westminster Symbols, now in progress in the Presbyterian churches of the world, will probably eventually result in casting those symbols aside as barriers to church unity and as no longer suitable expressions of the faith and life of the Church in our day.

Dogmatic theology is in a state of dissolution and reconstruc-The dogmatic theologians have elaborated Protestant dogma far beyond the later symbolical books of Protestantism. Thinking men are going back to the symbols of the Reformation, and then back of these to the ecumenical creeds, and then still further back to the theology of the Bible itself. The theology of the Bible was sadly neglected by the scholastic divines, and it has found no adequate expression in the symbolical books of any of the great churches of Christendom. They, for the most part, pursued false methods of exegesis. They knew little or nothing of Biblical criticism. The lower or textual criticism, the higher or literary criticism, and historical criticism are sections of modern scientific study of the Bible. Criticism has made the Bible a new book. And the discipline of Biblical theology which builds on the results of criticism finds in the Bible a new theology—new not in the sense that it destroys any-

<sup>\* &</sup>quot;How Shall We Revise?" pp. 4-5.

thing that is valuable in the old theology; but that on the one hand it is simpler, fresher, full of life and energy, quickening and fascinating people as well as preacher, and, on the other hand, more comprehensive, more profound, more symmetrical and harmonious. It is sublime and indeed divine, because it brings us face to face with holy prophets and with God himself. The old scholastic dogmatics, in which the most of the ministry now in service have been trained and which they have been taught as the rule of faith by which to interpret Bible and history, Christian experience and human life, is now confronted by a Biblical theology that convicts it of exaggeration in human speculation, of misinterpretation of the Word of God, and of ignorance of some of the most important facts and teachings of the Scriptures. Biblical theology has made it evident that the dogmatic systems have obscured the Biblical elements with the ecclesiastical and the speculative, and have thereby too often made the word of God of no effect by their traditions.

Historical theology has undermined and destroyed, in large measure, ecclesiastical claims of the dogmaticians. We now know well the history of doctrine and the history of dogma. The story of creed-formation in the early Church, and the controversies resulting in the construction of the symbolical books of the modern churches have for the most part been made evident by the historical investigation of their sources. The claims of authority that were strong when these creeds and symbols were enveloped with a halo of mystery, which made them appear as well-nigh inspired, can no longer resist the evidence of human passions and strifes, the false use of Scripture and history, the improper methods of argumentation, the errors in philosophy and psychology that to such an extent influenced the authors of the creeds in their doctrinal definitions. We have learned to distinguish (1) Biblical theology, (2) the history of dogma, (3) the doctrine of the creeds, (4) the speculations of the dogmatic theologians. The systems now in use in the United States, for the most part, were constructed without any use whatever of the more fundamental departments of theological science, and yet in childlike simplicity and cool dogmatism it is assumed that they are Biblical, churchly, and confessional. When the creeds

of the churches are tested by the Bible and by history, they do not sustain the test well enough to resist the demands for revision and for new and simpler creeds. I have recently shown that the churches subscribing to the Westminster Confession have widely drifted from it in the teaching of their leading theologians and in the preaching of the pulpits.

"The Westminster system has been virtually displaced by the teachings of the dogmatic divines. It is no longer practically the standard of the faith of the Presbyterian Church. The catechisms are not taught in our churches, the confessions are not expounded in our theological seminaries. The Presbyterian Church is not orthodox, judged by its own standards. It has neither the old orthodoxy nor the new orthodoxy. It is drifting toward an unknown and a mysterious future."\*

I have also shown in another place, by a comparative table of the Westminster Confession and two of the leading dogmatic systems of recent times, that the proportions of the faith of the Westminster Confession have entirely changed.

"New doctrines have come into the field, old doctrines have been discarded; some doctrines have been depressed, other doctrines have been exalted. The systems are different in their structure, in their order of material, in the material itself, in its proportions, and in the structural principles. The essential and necessary articles of about one half of the Westminster system are in these systems, but the other half, with its essential articles, is not there." \(\delta\)

I have also shown from a table of all the proof texts of the Westminster Confession that 667 texts are from the epistles of Paul and the epistle to the Hebrews, and only 248 from the Gospels and 247 from the other writers of the New Testament.

"Thus the Confession is built on the words of Paul rather than the words of the Lord Jesus. It is Pauline rather than comprehensively Christian." ‡

"There are so many omissions of important doctrines of Holy Scripture, there is such a disproportionate use of the darker and gloomier side of the Bible, and such a neglect of the brighter and more gracious side, and there is such a difference between the Confession and the preaching of the pulpit and the reading of the Bible in our homes, that something more than revision will be required to meet the necessities of the case, and we must set our faces toward the new creed as the only adequate solution of the difficulties of the situation." §

\* "Whither?" pp. 223-224. ‡ Ibid., p. 139.

† "How Shall We Revise?" p. 11. § Ibid., pp. 181-2. The Westminster Confession having already been displaced by dogmatic systems, these will give way to new systems constructed on more scientific principles and in closer harmony with the Bible and history. Such systems will distinguish between the essential and the non-essential in Christian doctrine, and thus prepare the way for a consensus creed expressing the essential doctrines in the forms suitable for public worship, reserving the non-essential doctrines for the discussion of the class room, the lecture, the treatise, and the club.

The Church of England and her daughters no longer regard belief in the entire body of the Thirty-nine Articles as essential to ministerial work. The Methodists have reduced these articles to a simpler form and are not rigid in the acceptance of The Congregational churches no longer insist upon the Savoy Declaration or the Cambridge Platform. The Baptist churches have no common confession of faith that binds them, but at most simple congregational creeds. The Protestant churches of the Continent have for the most part laid aside the symbols of the Reformation. Where this has not been formally done by official action, it has been really accomplished by common consent. There is a general tendency throughout Protestant Christendom toward simple statements of faith and a general acquiescence in the old ecumenical creeds as sufficient even for our times.

There have been great advances in doctrine and in dogma in modern theology. The dogmatic divines have generally laid more stress on the new doctrines than on the old ones. A recent study of the Apostles' Creed in comparison with several systems of dogmatic theology in general use at the present time showed that six of the articles of the creed (1, 2, 3, 4, 11, and 12) are elaborated in more or less fullness in the dogmatic systems; that six of them (5, 6, 7, 8, 9, and 10) have been to a great extent ignored, and that there are six doctrines, not in the two ancient creeds, to which the two representative dogmatic systems of Dr. Charles Hodge and Dr. W. G. T. Shedd give twice the attention that they have given to the 12 articles of the creed. These doctrines that have risen into so great importance as to suppress the ancient catholic doctrines of the Church are: (1)

inspiration of the Scriptures, (2) the divine decree, (3) original sin. (4) vicarious atonement, (5) imputation of the rightcousness of Christ, (6) everlasting punishment. This group of doctrines is just where the Church is divided. These have been exaggerated in their importance, while doctrines in which there is concord are passed over lightly or else entirely overlooked. The tendency of American dogmatic speculation has been in one direction, while the tendency of the faith of the home and the pulpit has been in another direction; so that a crisis has been reached and a break has come between a so-called conservative dogmatic theology, which is really radical in its elaboration of speculative dogma, and the faith and life of the Church, which adheres to the simpler statements of the Bible and to the ancient creeds.

The tendency of thought in the present century has been toward the person and work of Jesus Christ. This urges a return to the ancient Christological creeds. The life of Christ has been studied as never before. The doctrine of the incarnation has again become prominent, especially in the Anglican Church. More attention is now given to the doctrine of the resurrection, enthronement, and second advent of our Lord. This tendency is becoming stronger every year; it will eventually become so powerful that all modern doctrines will be Christologized, and then it will be possible to put them, in their essential contents, into the devotional form, and to introduce them into the liturgical worship of the Church.

The Reformation did not go on to its completion. It came to a halt too soon. It over-emphasized justification and neglected sanctification; it exaggerated faith and depreciated holy love and good works. It threw away purgatory and left the middle state between death and the resurrection a blank. It is now clear to the historical critic that there is one-sideness in Protestantism as well as in Roman Catholicism; that neither of these great religious bodies is to conquer the other; and that a reconciliation can take place only by each overcoming its own defects and becoming more comprehensively Christian.

Modern critical philosophy, science in all its branches, history, and the critical study of the Bible are all working together

to give the theologian treasures of truth unknown to former ages. The critical study of the Bible makes it a richer and a grander book, and finds mines of doctrines, new as well as old. The Church, to the thoughtful student of history, becomes sublime, notwithstanding all its defects, as the Kingdom of Christ on earth. The reason, in the researches of modern science and philosophy, has become a vastly more potent factor in the apprehension and in the comprehension of divine truth. There is a reconciliation to be looked for, to be longed for, and to be labored for, in the future, to which Churchman, Rationalist, and Evangelical may each contribute. We may reasonably expect that the theological conflicts, the dissolutions of old theology, the reconstruction of new theology, the intense and eager researches after the truth of God, will result in a crisis in which all of the forces of Christianity will come into play in order to give birth to a new age of the world in which the discord of Christendom will die away, and concord will live and reign and express its new faith and new life in a creed, a choral of praise to the triune God, in which all the essential doctrines of Christianity, learned from all the struggles and triumphs of twenty centuries, will be grouped about the Father, the Son, and the Holy Spirit.

In this period of transition there is need of patience, charity, courage, sound judgment, and at the same time passion for the truth. There are some who would do away with all creeds. To these we reply that the Church has had creeds from the beginning. It must have them to express its faith and life and unity. The excesses committed by the modern Church in all its branches ought not to drive us into opposite excesses. Let us correct the evil, remove the error, and make no more mistakes. Let every Christian rally to the position of the Anglican Church that the Apostles' Creed and the Nicene Creed are sufficient.

There are others who still insist upon subscription to the elaborate creeds of the modern Church. I have no difficulty myself in subscribing to the Westminster Confession in the historic sense of the terms of subscription as interpreted by the Adopting Act of 1729, and defined by the synod of New York and New Jersey. But I have difficulty in uniting with others in the Presbyterian Church in exacting such subscription as a con-

dition of ministerial service. And I shall do all in my power to relieve tender consciences and to remove the stumbling blocks from the way of the troubled seekers after truth. The Westminster Confession is a system of doctrine of exceeding value as the historic expression of the theology of the Puritan divines of the seventeenth century; but it contains a large amount of doctrine that is rejected by the vast majority of Protestant ministers, and much of it is not essential or even of very great importance. Presbyterians should, however, be patient and loving, and in chivalric contest endeavor to bring about the revision that is needed.

The aim of Christianity is to march forward toward the full realization of the Christian ideal. We should use our utmost endeavor to construct a new consensus creed that will better express Christian faith than the old creeds. The Alliance of Presbyterian churches is approaching this problem with some degree of hopefulness of ultimate success. When each of the great alliances of Christian denominations has reduced its symbols to consensus creeds, it will be easier to frame a consensus creed in which all may unite. It is evident that the twentieth century will have great problems to solve in the relation of Church and creed, and thoughtful men in all denominations are preparing for the crisis.

C. A. Briggs.

#### THE COMMONWEALTH OF AUSTRALIA.

THE British Colonial Office was wise enough, as long ago as 1849, to include in a bill clauses which provided for the possible creation of a general assembly for two or more of the Australian colonies. The House of Lords, however, rejected the proposal, and Lord Grey informed the colonies that the government had consented to abandon this portion of their measure because they found that, while New South Wales did not care for it, the other colonies had raised objections. At the same time, Lord Grey stated that his personal view was that the need of a central authority for Australia would be felt, and that probably at an early period.

In 1853 Mr. Wentworth, in drawing up a constitution for New South Wales, suggested federation to the extent of a power to legislate, by a general assembly, on all subjects which might be submitted to it by addresses from the councils or assemblies of other colonies; with a federal revenue and a general court of appeal. The creation of such a body Mr. Wentworth and his committee thought was "indispensable" and "ought no longer to be delayed." In 1857 Mr. Wentworth proceeded to London to advocate this scheme, which was the germ of the idea which ultimately took shape in the Federal Council of Australia. Lord Grey may, therefore, be looked upon as the wise man who foresaw, and Mr. Wentworth as the practical man who shaped, the earliest Australian federation. Sir Henry Parkes it was, as we shall presently see, who seized the moment to push the idea of a closer federation to the front.

A colonial conference assembled in 1881, and its outcome was the establishment of the Federal Council by Act of Parliament in 1883: but this council was deprived of authority by the refusal of New South Wales to join it. In October, 1889, a report by a general officer, who had been sent from Hong-Kong to make suggestions on the military forces of the Austra-

lian colonies, was seized on by Sir Henry Parkes as giving him a leverage. The Prime Minister of New South Wales started for Queensland, and there conferred with Sir Samuel Griffith and Sir Thomas McIlwraith upon the whole subject of federation. Finding that he obtained support in Queensland from both parties, he made a public speech in which he declared boldly for a large scheme, and then communicated with Victoria and the other colonies. The Victorians were inclined to insist on using the Federal Council as the basis of the scheme, but Sir Henry Parkes soon managed to drive or persuade them out of this position; and he proposed in a dispatch to Mr. Duncan Gillies, the then Prime Minister of Victoria, that very scheme for a conference which was afterward accepted, and a plan of federal government more complete than that which the conference of 1890 and the convention of 1891 have brought about; for he stated that he assumed that the scheme of Australian federal government would follow the type of the government of Canada.

I need not explain to American readers, familiar with federal constitutions and their differences, that the Canadian constitution yields a federalism far more close or centralized than that of the United States. The lieutenant-governors of the Canadian provinces are named by the Viceroy on the advice of the Dominion cabinet. The central government of Canada possesses all powers which are not definitely allotted by Act of Parliament to the provinces. In this and other ways Canada is more one country than is the United States. The historic growth of many of the Commonwealths which compose the United States, such as the Commonwealth of Massachusetts, explains the jealousy with which in the United States the federal power has been viewed. In Canada, Quebec and Ontario and some of the maritime provinces had a somewhat similar, although a shorter history, but seem to have been welded together into a single country by jealousy of their great neighbor. In Australia there was no historic reason making against national unity; but local jealousies and local interests, which have grown up under the protectionist policy of the majority of the colonies, have weakened the idea of Australian unity and interfered with the completeness of the Parkes scheme.

The Prime Minister of Victoria informed the Prime Minister of New South Wales that the latter, "the great mother-colony, has unfortunately stood aloof from such federation as was at the time possible, thus barring the way to Australian unity." This was very true, but unimportant in face of the fact that Sir Henry Parkes had taken up a position which made him master of the situation, in having seized the right moment to swim on the crest of a wave of federal feeling.

In February, 1890, there met at Melbourne a conference of representatives of the whole of the Australian colonies and of New Zealand, and a vague federal resolution was proposed, containing the word "Australasian" so as to include New Zealand. It was carried, with the substitution of the word "Australian," inasmuch as the New Zealand representatives stated that they could not come into federation, although friendly to the movement. On the motion of one of them, Captain Russell, a further resolution also was carried, to the effect that to the union of the Australian colonies the remoter Australasian colonies should afterward be entitled to admission, on conditions to be subsequently arranged. The phrase "the remoter Australasian colonies" was intended to include New Zealand, as well as Fiji, both of which are within the purview of the Federal Council Act, the crown colony of Fiji being, moreover, actually represented on the existing loose Federal Council. Federation resolutions, for appointing delegates to the conference of 1891 to be held at Sydney, were passed in 1890 by all the Australasian Parliaments, and at the beginning of March of the present year the convention met.

The leading member of the convention was, of course, Sir Henry Parkes—an old man of boundless energy and much rugged power, who has completely dominated the assembly. He is not Australian born, and considering that Australia is no longer a young country, for we have among us an elderly bishop whose father was born in New South Wales, it is curious that little more than a third of the leading men of Australasia who appeared at the convention were "native born." The framers of the American Constitution were all born Americans. But of the 45 Australasian delegates only 16, I think, were "native born," while 12 were born in England, eight in Ireland, six in Scot-

land, one in Wales, one in the Isle of Man, and one, Sir George Grey (known as the "Grand Old Man of New Zealand," as Sir Henry Parkes is known as the "Grand Old Man of Australia"), born on the continent of Europe. Four of the 45 delegates were Roman Catholics. Taking a cross-division, 18 were lawyers; eight belonged to the squatter aristocracy; eight were commercial men. Among them were all the Prime Ministers of Australia, although not the Prime Minister of New Zealand. Next to Sir Henry Parkes the leading members of the convention were Sir George Grey, Sir Harry Atkinson, the late Prime Minister of New Zealand, Mr. Deakin and Mr. Duncan Gillies, of Victoria, and Sir Samuel Griffith, of Queensland. Sir Henry Parkes was born in Warwickshire before Waterloo; worked as a child in the fields and in rope works; was apprenticed at the age of 12 to a Birmingham ivory and wood turner, and emigrated at the age of 24 to Australia, where he worked at first as a farm labourer, and then in a dry-goods store, then became a petty customs officer, and then set up a tov shop—working at the lathe and devoting his leisure to poetry and politics. He afterward established the "Empire," a daily newspaper of the popular party, and in 1854 was returned to the first Parliament of New South Wales. Since that time he has been fourteen years Colonial Secretary of New South Wales, and for eleven years Prime Minister. The career of Sir George Grey is almost as remarkable as is that of Sir Henry Parkes. He was born in 1812. In 1837, when an officer in the British army, he became the first explorer of the southern part of Western Australia, then Governor of South Australia, then Governor of New Zealand, then Governor of the Cape, then again Governor of New Zealand and author of the New Zealand Constitution; after which he left the "colonial service," being recalled by the home government, and then settled in New Zealand and became Prime Minister, and after that leader of the Radical party. In his old age he advocates the election of colonial governors, the Henry George scheme of single tax, the nationalization of coal mines, and other advanced measures, which sound oddly when they fall from the eloquent lips of this old gentleman, a K.C.B., a D.C.L. of Oxford, and an ex-officer of the British army. The other New Zealand delegates, if they had

also about them a military tinge, had nothing of the Radical. Sir Harry Atkinson, English born, formerly known as Major Atkinson, had been a most successful Minister of Defence, after his brilliant service in command of the militia in the Maori war, before he became Prime Minister; and Captain Russell, also English born, had held a commission in the British army, and also belongs to the New Zealand aristocracy.

The Victorian members were of a different type, and the two most distinguished among them, the former leaders of the coalition government recently displaced from power, Mr. Duncan Gillies and Mr. Deakin, have nothing about them either military or aristocratic. The Prime Minister of Victoria, indeed, was one of the Victorian delegates, but Mr. Munro was altogether eclipsed at Sydney by the leaders who had been beaten by him in the Victorian Parliament. Mr. Munro and Mr. Gillies are both Scotch born and are of about the same age. Mr. Munro had been a printer in Edinburgh before he emigrated at the age of 26 and settled in Victoria as a printer, though he afterward became engaged in industry as a capitalist. Mr. Gillies I described fully in my "Problems of Greater Britain;" as is also the case with his colleague Mr. Deakin. Mr. Gillies had been a digger, having emigrated during the gold fever, and had been returned to Parliament by the diggers and kept by them on wages, but had become by his ability in debate the leader of the Victorian Conservative party. Mr. Deakin, the leader of the Liberal party, is the man of greatest promise in all Australia; "native born," for he saw the light in Melbourne in 1856, a barrister, a journalist, a great administrator, a man of extraordinary eloquence and immense charm.

Mr. Barton, of New South Wales, who, in addition to those well-known statesmen that I have specially named above, took an active part, is also Australian born, although an older man than Mr. Deakin, and he is one of those who improved their position by their appearance at the convention. Mr. Barton must now be looked upon as one of the future leaders of the Australian people. Mr. Dibbs, still older, is also Australian born; but has probably less future than either Mr. Deakin or Mr. Barton. Several of the representatives of New South Wales are well-

known free traders, as is Captain Russell, of New Zealand; and the most prominent among the free-trade representatives of the mother colony at the convention, after the Prime Minister, Sir Henry Parkes, was Mr. McMillan, a member of the firm founded at Sydney by his relatives, the McArthurs, the ablest and wisest representative of high finance in the Australian Parliaments.

From Queensland came Sir Samuel Griffith, who brought with him the other leader of the coalition, Sir Thomas McIlwraith, but who wielded at the convention far more power than his colleague. Sir Samuel Griffith is a Welshman, who at the age of nine years emigrated with his father, who had been a Congregationalist minister at Merthyr; he was educated at Sydney University and has for some years been one of the leading men, if not the leading man, upon the Australasian Federal Council. Sir Thomas McIlwraith, a Scotchman educated at Glasgow University, who annexed New Guinea without the consent of the mother country (and who all through his career as Prime Minister was greatly hampered by his then bitter opponent but present colleague—the present Prime Minister, Sir Samuel Griffith), has a high reputation in Australia and is free from the "viewy" Radicalism of Sir Samuel Griffith. The two together make about as powerful a combination (proportionately speaking) as though in England in 1880 Mr. Gladstone had joined forces with Lord Beaconsfield.

The representatives of South Australia and Tasmania bear a high reputation in their own colonies, but are little known outside Australia. The same may be said of Mr. Forrest, of Western Australia, who, however, is known to the Geographical Society of Great Britain, of which he is a gold medallist, as a remarkable explorer. He brought with him Sir James Lee Steere, son of a former member of the House of Commons of the United Kingdom, who has wielded much power on the Federal Council, but who at the preliminary federal conference at Melbourne in 1890 was rudely crushed by Sir Henry Parkes, who told him that the little suburb of Sydney in which he lived had more importance (possessing a larger population and more trade) than the whole colony of Western Australia.

Such were the chief men gathered at Sydney. Characteris-

tically, being mainly Britons, and Australians themselves being Britons as far as dining goes, they began their labors by a banquet. At this the Prime Ministers all spoke; but Sir Henry Parkes set the keynote by an ultra-loyal speech made by him in proposing the toast to the Queen, which was telegraphed word for word to England, and which was obviously intended to quiet imperial feeling upon the point of possible separation.

When the convention met, the Prime Minister of Victoria moved, and Sir Samuel Griffith, the Prime Minister of Queensland, seconded, a motion that Sir Henry Parkes, the Prime Minister of New South Wales, should be president of the convention, with the understanding that he should be expected to take as full and free a part in the debates as though he had not been elected to the chair. At the second sitting notice was given by Mr. McMillan, on behalf of Sir Henry Parkes, of the resolutions which were to form the basis for the deliberations; and in these, which have been carried with little change, we may see that Sir Henry Parkes had already modified his views as previously put forward, so as to avoid much possible opposition, and had virtually replaced his first idea of a Canadian constitution by that of a constitution of what we call the American type, though trans-Atlantic leaders will, perhaps, not recognize it as such.

The first resolution was to the effect that the powers and territorial rights of the several colonies should remain intact except in respect of such surrenders as might be agreed upon as necessary to the authority of the federal government.

This resolution not only vetoed anything like Canadian centralization, but also raised the difficulty (which is one of the greatest real difficulties in the way of federation of the kind proposed) that every one admits that Queensland and South Australia must speedily be divided, while Queensland and South Australia themselves may not be able to furnish a majority in favor of division.

The second resolution stated that intercolonial trade must be free; a doctrine which is admitted by the majority of the Victorian protectionists, and which to the New South Wales free-traders means that they give up free trade as regards the world to secure free trade within Australia; but which involves the second of

the greatest difficulties in the way of the acceptance of federation by all the colonies, namely, that South Australian protectionists and those of some other colonies may still desire protection against the manufacturers of Victoria. The third and fourth resolutions, concerning customs duties and federal defense, were obvious and inevitable; and then the resolutions turned to the framing of a federal constitution.

Sir Henry Parkes laid down the necessity of having an elective Senate representing provinces, and a popular chamber elected on a population base, possessing the sole power of originating and amending taxing bills. It was on this last point that the greatest difference of opinion manifested itself at the convention, the representatives of the less populous colonies (to be equally represented in the Senate with Victoria and New South Wales, the populous and wealthy states) naturally desiring to give that body equal powers with the popular House, in which New South Wales and Victoria would, if agreed, be absolutely dominant. The resolutions next proposed the creation of a federal "supreme court" as a final high court of appeal for Australia. On this point also much debate at once arose, Mr. Barton pointing out that the endeavour in Canada to get rid of the jurisdiction of the Privy Council for the Dominion had been a fruitless one, because the imperial government had refused to assent to such a transfer of power. Mr. Barton, however, thought that, though it was doubtful if the imperial government would now assent to the exclusion of the Privy Council, the provision should nevertheless be inserted. He admitted that assent to it might be refused, and that the refusal would provoke dissatisfaction. Mr. Deakin had argued that, in cases where imperial interests were concerned, and where the uniformity of interpretation of the law might be endangered by the exclusion of the Privy Council, there might be exceptions made, and Mr. Barton in his reply did not appear wholly to shut out that possibility. For my part, I should prefer to see the Privy Council receive into its ranks the most distinguished of colonial legists and become a Pan-Britannic supreme court. No form of British unity could so strongly tend to keep us one people to the end of time—one in law as in race and tongue. The clause as afterward

carried in the bill is similar to the Canadian clause, and acceptable to those who hold my view. The last of the resolutions specified the British system, as contrasted with that of the United States, that is, that ministers should sit in Parliament and depend on the confidence of the House of Representatives as expressed by the support of a majority.

It was at once decided that the press and the public should be admitted to the sittings, and then Sir Henry Parkes made a

moderate speech in favor of his resolutions.

I shall only very briefly mention the debates, as it is chiefly with results that we must concern ourselves. Sir Samuel Griffith contended that the proposal to give the House of Representatives sole power over money bills, except that the Senate would have the power of rejection, was inconsistent with the independence of the Senate as representing what Sir Henry Parkes had called provinces but what he called states. He was supported by the Prime Minister of Tasmania upon this point.

Mr. Deakin put in, on behalf of the protectionists, a plea for a proviso that a certain time should be given before vested interests, the results of protection, were interfered with.

The debate on the resolutions was divided into two parts—a general debate and a debate in committee, resolution by resolu-The first half of the debate was concluded by Sir Henry Parkes in a powerful reply. He again quarreled with the Western Australian delegates and said that if they were going to hold aloof from federation, as they had hinted, so might the mother colony. He strongly supported his own original view as to the different powers that should be given to the two Houses in dealing with money bills. It having been suggested that, by the very words of the constitution, the federal ministry should personally and directly represent all the colonies, Sir Henry Parkes opposed that being laid down as a condition, and he also opposed the responsibility of the federal ministry to both Houses of Parliament, instead of to the popular House alone, which had been asked for by the representatives of some of the less populous colonies.

In committee, the first two clauses of Sir Henry Parkes's resolutions were carried, apparently without change. The third

clause was carried with slight alterations, and the fourth, as to federal defense, without debate. On the first clause of the second part of the resolutions, dealing with the constitution of the federal Parliament and the powers of the two Houses, Sir John Downer, on behalf of South Australia, moved an amendment giving the Senate the power of amending money bills. He was strongly opposed by the representatives of Victoria and New South Wales, but supported by Sir Thomas McIlwraith on behalf of Queensland, by the Prime Minister of his own colony, and by one of the Tasmanian representatives. The clause was then referred to a select committee, and ultimately passed, as we shall soon see, almost in the form in which it had been recommended by Sir Henry Parkes, but only by an ominously small majority. Here, then, is the first rift—the danger that the less populous colonies will refuse to accept the provisions of the bill as to the Senate having, in money matters, only the power of the House of Lords, on which Victoria and New South Wales seem likely to insist.

The federal supreme court clause was carried in an amended form which, as has been said, appears to follow Canadian precedent, and to create a high court of appeal, but not necessarily a final court of appeal as against the Privy Council. A new clause was inserted, distinctly specifying that territorial divisions should not be made so as to create new states without the consent of the states concerned—another rift, for the reasons applying to Queensland and South Australia which have been given; but one less likely to cause actual break-down than the one with regard to the Senate which has just been named; less, too, than the difficulty as to the choice of a capital, which was not faced at all, or than the protectionist fear of Victorian manufactures.

It was next decided to prepare a bill for the establishment of a federal constitution, to be submitted to the convention with the view that it should afterward be placed before the Parliaments of the various colonies. The bill was presented on the 31st of March and considered in committee on the 1st of April.

The first division was on the title, and that of "The Commonwealth of Australia" was carried by 26 votes to 13. It is a thoroughly Anglo-Saxon title, often employed for the state or

the community in monarchical times in England; as, for example, in the translation of the Bible. Sir George Grey moved an amendment in favor of the election of the governor-general by the people, which was negatived by 35 to 3. It was decided that, pending the adoption of a uniform tariff, present duties should remain in force.

By the draft bill as passed, which, however, requires action on the part of both the imperial and the colonial Parliaments to make it law in any colony, the Federal Council Act is to be repealed. There is to be a governor-general with a salary of not less than £10,000 a year, and a Senate and House of Representatives, whose members are to receive £500 a year apiece. The Senate is to consist of eight members from each state, chosen by the Parliaments of the states, half retiring every three years.

The South Australians having again moved their amendment in favor of giving the Senate equal power with the lower House with respect to all bills, were beaten, but only by 22 to 16. The bill as carried, however, contains a compromise, by which the Senate may return money bills to the House of Representatives with a message requesting it to amend such bills, on which the popular House may or may not act.

The House of Representatives is to be elected every three years by the people of the several states in proportion to their population, on a basis of one member for every 30,000 people. The suffrage for this purpose is to be that adopted by themselves for the election of their own popular House.

The constitution of the Australian commonwealth, as provisionally adopted, does not make Australia one great state such as the Canadian Dominion, but, subject to the consent of the Parliaments of the various colonies, creates a series of federal statelets more or less loosely attached to one another. It may have been a necessity of the condition of affairs existing in America after the revolutionary war that the least populous state should have been given equal representation in the Senate with the most powerful. There all alike were sovereign; but it seems unfortunate that in a brand new Senate in Australia, where within the lifetime of living men there was but one colony, there should be such semi-sovereign rights conceded, contrary to the principle

of population, to Tasmania and Western Australia. However, practical politicians are always in the position of making the best of things and accepting conditions as they find them, and as Australian federation cannot be brought about without the consent of the smaller colonies, it has doubtless been necessary to buy that consent by political concessions. It might have been better to have bought the provinces as they were bought in Canada, by lavish expenditure upon public works and special arrangements with regard to debts and borrowed money. As far as it is possible to be certain as yet of the final condition in which the draft bill passed the convention, it would seem that the central government in Australia is not to possess the exclusive power to regulate criminal law and the appointment of the superior judges. If this be so, the difference in this respect between the Australian and the Canadian constitutions, and the following by Australia of the plan pursued in the United States, will lead to difficulties such as that now pending between the State of Louisiana and the government at Washington. Such occurrences are almost sure to happen in northern Queensland with regard to the position of the Chinese and other alien races. The inability of the Australian commonwealth, even after the bill shall have been carried through all the Parliaments, to carve out fresh states or provinces without local consent, which it may be very difficult to obtain, is, as has been suggested, another singularly weak point in the new constitution.

Slight, however, as is the federal tie created by the bill, when contrasted with that which exists in Canada, it may be difficult enough to bring into existence by the consent of all the Parliaments. The Victorian Prime Minister has said that he thought that the difficulty raised by the less populous colonies insisting on the power of the Senate to amend money bills might be sufficient to defeat the object for which the convention was called. If such claims in respect of the powers of the Senate were persisted in, he doubted whether Victoria and New South Wales, with two thirds of the population and two thirds of the wealth, and with only one third of the representation in the Senate, would ever give such a body power to amend tax bills. On the other hand, it is probable that if Victoria and New South Wales

insist on having their own way upon this point and retaining the words of the bill as passed, some, if not all, of the less populous states may stand out. The Canadian Dominion was not constituted all at once. Federation was begun by the two Canadas and two of the maritime provinces in 1867. Manitoba and the North-west came in in 1870, British Columbia in 1871, and Prince Edward Island only in 1873, while Newfoundland still holds out. It is conceivable that Victoria and New South Wales, possibly with one or two of the other colonies, may found a commonwealth without waiting for the whole of the colonies to come in; although the existence of the Federal Council is perhaps a difficulty in the way, as the imperial government and Parliament may not feel disposed to pass an act to destroy one imperfect federation in order to substitute another little more complete. If, however, a commonwealth comes into existence by imperial and local legislation, it is of course possible that it may gradually grow by subsequent legislation into a more complete federal union, as the Swiss confederation has gradually grown in the same direction.

The draft bill as "passed" provides that the governors of the states are to be appointed by the local Parliaments as these think fit; that the seat of government shall be determined by the federal Parliament, and until so determined shall be fixed by a majority of the governors of states. It provides for constitutional amendments by laws to be passed by an absolute majority of both Houses and thereafter to be submitted to conventions elected by the electors of the several states qualified to vote for the election of members of the House of Representatives. If a constitutional amendment is approved by the conventions of a majority of the states, it is to become law, subject to the Queen's power of disallowance. There is, however, a proviso that no amendment by which the proportionate representation of any state in either House of Parliament of the commonwealth is diminished, shall become law without the consent of the convention of that state. This clause, of course, prevents any change in the constitution of the Senate whereby the less populous states should have their representation in that body diminished, compared with that of the greater states. Generally speaking, the

alterations made in committee did not affect the principles of the bill.

In closing the convention Sir Henry Parkes congratulated the body and Australia on the rapidity with which events 'ad marched, although he admitted that possibly the time for actual federation had not arrived. Sir Samuel Griffith then moved that as soon as the constitution had been adopted by three colonies the imperial government be requested to take action to establish the constitution in respect of those colonies, and this was carried. Queensland, no doubt, intends to try to come to terms with Victoria and New South Wales, in the hope that South Australia and Tasmania will then come in and that Western Australia may be bought.

New Zealand, it was understood, would not favour immediate entrance into federation. The opinion of New Zealand, as expressed by Sir George Grey on behalf of the Radicals of the imperial school, and by other delegates representing a more conservative opinion, is that the "Britain of the South" is so distant from Australia that early union would be impossible. It may, however, prove possible for New Zealand to arrive at a reciprocity treaty with Australia, as regards trade. Sir George Grey is a believer in imperial federation of a loose kind; and imperial federation is more generally favoured by the New Zealand colonists than by those of Australia. Sir George Grey, however, thinks that a barrier against the participation of New Zealand in Australian federation is to be found in the coloured labour question, which he believes is one of the first difficulties which an Australian federal Parliament will have to face. He has declared that the northern territories, if they are to be worked at all, must be worked with coloured labour, and although he is opposed to the employment of Chinese labour, thinks that Kanakas and Indian coolies might wisely be employed in the North. Sir George Grey's information differs entirely from my own, which is to the effect that, even in the event of a division of the colony of Queensland, the majority of the people in the North would oppose the introduction of coloured labour; and I regard it as most unlikely that this question will be raised in the federal Parliament should it meet, or at least be raised with the slightest chance of a reversal of the recent policy of exclusion of coloured labour. No doubt the growing of tropical produce upon the northern coast will be prevented if I am right, but I firmly believe that the Australian people have made up their minds that the continent is to be reserved for white men, and that those industries which cannot be supported by white labour are not to be encouraged upon Australian soil.

It is to be noted among secondary points that, except as regards the speeches of Sir Henry Parkes, all effusive expressions of loyalty were absent from the gathering; but, on the other hand, Mr. Dibbs was the only leading delegate who distinctly stated that the ultimate destiny of Australia was to be a republic. Mr. Gillies replied to Mr. Dibbs that the idea of the foundation of an Australian republic could "only belong to the minds of men" who were "living a century from now." Sir George Grey, without mentioning the word "republic," advocated, as we have seen, the election of the governor-general, as against his nomination by the Queen. Sir George Grey explained, however, in his most eloquent speech, that he did not desire that the connection with the monarchy should cease, but thought that if the governor-general was elective as he proposed, the Sovereign of England would still be represented by him and be a member of the Australian legislature.

The Western Australian delegates suggested that there would be much difficulty in inducing their colony to join the federation, and they virtually asked for money, as I read their words.

On the 9th of April the convention came to a close, and a certain reaction was at once observable in the colonial press and in the speeches of colonial statesmen. Two by-elections in New South Wales have been carried by anti-federalists. The "Age," which has influence as the organ of the protectionist party—known in Victoria as the Liberal party—and to which Mr. Deakin and many of his former colleagues are contributors, has pointed out that the convention itself is "strictly subordinate" to the Parliaments which created it, and that its work has to be reviewed on independent terms by seven distinct Parliaments. The representatives of New Zealand had been present "from motives of friendship rather than with any serious intention of

taking a share in later developments," and from one or other of the remaining six Parliaments there were certain to come suggested alterations. Although Sir Henry Parkes, as a free trader and a representative of a free-trade colony, went very far in practically yielding the point of protection against the world, certain to be adopted in any federal Parliament, the Victorian protectionists insist that the question is a vital one and must not be "left to the mercy of federal caprice," and have declared that it would be absurd to submit to a Victorian Parliament a plan of federation which makes no mention of protection; and the "Age" has written that it would be better to let federation wait than risk the loss of the benefits arising from protection. Unless the object of the "Age" is to prevent the new federation from being brought into existence, it is difficult to see the object of insisting upon amendments upon this point, given the fact that there is not the slightest practical chance of the adoption of general free trade by an Australian Parliament. Henry Parkes and the free-trade mother colony have certainly made an enormous concession of principle in virtually accepting protection at the hand of the other colonies in order to secure federation, and it is asking too much of them to insist that what has been virtually conceded shall be, by an altogether exceptional provision, definitely inserted in the constitution act. It is, moreover, difficult to see in what form a binding protectionist declaration could be made.

Generally speaking, I should myself have preferred to have seen Australia regard itself more as a single federal state, and less as a body of separate states united only for the common purposes of defense and trade, and should have wished to see state or provincial rights more strictly defined and more absolutely subordinated to the Australian common government. Even now, however, there may be many a slip. It will be difficult to induce Victoria and New South Wales respectively to be content to accept views forced upon them in each case by the rival and equally powerful colony assisted by some of the smaller states. The convention has separated without attempting to fix a capital for the future commonwealth, and this in itself is a sign of weakness. Sir Henry Parkes was favourable

to making Albury an Ottawa or a Washington, but did not venture to bring the proposal forward at the convention, for fear of exciting the jealousy of the great capital cities of the two chief states; and a suggestion has been thrown out that the government of the Australian commonwealth should be an itinerant show. Although the difficulty of the capital and some others have been evaded, it is even now probable that when the bill is submitted to the colonial Parliaments, many will attack it as a surrender of local liberties and demand amendments which it will be difficult to concede. Western Australia seems almost certain to hold off until it can deal with an already established commonwealth, which will be able to give it definite advantages, such as those by which Canada brought British Columbia into union. It is now suggested that the British Parliament should pass a bill which will put an end to the existing Federal Council and create the new commonwealth so soon as colonies representing three fourths of the population of Australia are prepared to federate, so that the assent of the legislatures of Victoria, New South Wales, and one other colony would be sufficient.

Difficulties may possibly be raised not only by colonial Parliaments, but by the imperial Parliament. It is conceivable, but most unlikely, that an attempt will be made in Parliament to make the Australian Constitution more like the Canadian by using the word "provinces" instead of "states" for the present colonies, by giving the governor-general through the federal cabinet the appointment of the lieutenant-governors, and by intrusting the central government, not—as is proposed—only with the matters named and with the matters definitely referred to it by the Parliament of any state, but, as in Canada, with all matters not exclusively assigned to the provinces. Above all, Parliament may conceivably decide that it is desirable that the criminal law shall be the same throughout Australia as it is throughout Canada, a provision not contained in the Australian bill. It is far more probable, however, that the interference of the home government and of Parliament will concern matters where the mother country might be brought into conflict with foreign pow-The Australian draft constitution gives to the federal body the control of treaties and of relations with the Pacific countries,

the exercise of legislative powers with respect to Australia at present exercised by the imperial Parliament, and control of the affairs of the people of any race regarding whom it is deemed necessary to make special laws not applicable to the general community. That the federal body should have these powers as against the separate colonies or states is obviously right, but if what is meant is that it is to obtain new powers, not at present handed over by the imperial Parliament to any colonial authority, the government and Parliament of the mother country must of course understand exactly what is meant and make up their minds how far they can safely go in trusting the Australians with the control of treaties and of their own foreign affairs. I myself am favorable to the concessions which will be asked for by Australia, but the action of the home government in the Newfoundland case is not encouraging.

I have written of the United States and of the Canadian systems as though Australia had had to choose between the two and had chosen the system of the United States; and this is so as regards points which to us appear the principal to be considered. The main difference lies in the uniformity in Canada of the criminal law, the nomination of the lieutenant-governors by the central cabinet, and the existence in the federal Parliament of power to legislate on all matters where the reverse has not been specified. In these matters, and in some others, Australia has failed to follow Canadian example. But to American readers the differences between their Constitution and that proposed for the Australian commonwealth will be more striking than the resemblances. The members of the cabinet are intended to sit in Parliament. They are to be responsible to the House of Representatives and dependent upon the support of a majority, and not, as in the United States, the ministers of an independent executive authority, able to act for a time in opposition to the country's will. In practice, also, the authority of the governor will be that of the most constitutional of constitutional kings, and very inferior to and very different from the authority of a president of the United States. There is, too, great difference of local feeling between the Australians and your people. The Australians are state socialists, and although

their new constitution proposes to recognize the independence of the states in a far higher degree than that in which it has been allowed to exist in Canada, yet it vests the virtual control of the whole railway system of Australia in the federal power, which will be a shock to your American minds, whether north or south of the Canadian border line.

A reason why I should have wished that Australia should have been made one by her new constitution concerns the inferiority of some of her existing Parliaments and the brilliant ability of some of her statesmen at present confined within spheres too small for them. Sir Henry Parkes is too big for New South Wales; Mr. Deakin's sympathies are too wide for Victorian limits; and Australia, which might produce a federal cabinet of seven members of the highest powers, with a federal opposition of seven leading statesmen ready to take their place and of almost equal fame, fritters her men away upon a number of small Parliaments, in some of which the level is very low. Coalition governments have succeeded in Victoria and have done something for that colony, and are being tried in Queensland and some others; but a coalition government for all Australia in a strong federal Parliament might bring about an era of social progress and a trial of state socialistic experiments such as the world has not yet seen—and probably would do so. The great majority of Australians have confidence in the power of the state to do much for the people, and in the wisdom of its exercising this power. You in the United States; the Canadians across their border; the continental governments, are far behind even old England in this respect, and it would be of advantage to the world that Australia, which is much before us all, should have the opportunity of putting its doctrines into practice upon the largest scale.

I cannot better conclude this article than by stating that if Australia comes together she will start as the eighth state in the world in wealth and revenue and trade, and indeed in all points except population. Her population is but four millions, but they are four millions of the best.

CHARLES W. DILKE

## IMMIGRATION AND THE TARIFF.

A LARGE number of people in the United States who have no latent prejudices against foreigners as a class, are at this moment seriously considering the wisdom of a stringent restriction of immigration. They affect to believe that the phenomenal assimilative powers of the Republic have at last reached their limits, and that the digestive functions of the state are being seriously disordered by the wholesale reception of incongruous, crude, and antagonistic elements of population. They insist that, vast as is the area of the Republic, and great as are its assimilative powers, they are not equal to the voracity of the national mouth at the barge office in New York. seriously discussing the wisdom of extending to certain other countries some features of the Chinese Exclusion Act, if that be possible. In some instances foreign-born workmen join in demanding the general restriction of immigration, while representatives in Congress from the South, where the foreign-born vote is comparatively light—men who cannot, therefore, be accused of pandering to naturalized citizens—are among the sturdiest opponents of restrictive measures. This latter fact may be attributed partly to a general dislike of anything antagonistic to the broad liberality of the Jeffersonian school, and partly to a dread of the numerical or political supremacy of the Negroes. Besides, a man looking on the vast, fertile, and as yet sparselypeopled sections of the South-west is not apt to dread unrestricted immigration as much as he who daily views the scenes of our great cities and those of mining and railroad centers.

It is not my purpose to express any opinion on the wisdom or the folly of leaving immigration unrestricted, but I certainly have no part in any general distrust of the foreigners who share our citizenship, nor in any prejudice against immigrants from other lands. The adult man sound in body and mind, of good character and industrious habits, intelligent, with some elemen-

tary knowledge of our institutions, whether he is skilled or unskilled, who comes to the United States deliberately in order to better himself as a man, intending to live and die here, to rear children, to make a home, and to become a devoted and loyal citizen, is a great national blessing to us, and should be received with a hearty welcome, from whatever land he may come. He is a rich gift from the land which suckled, nursed, reared, fed, protected, and trained him until it handed him over to us a "ready-made" man, with two strong hands, a clear head, and an honest heart. A hearty welcome to him, whether he be Saxon or Celt, Norseman, Latin, Slav, or Teuton! Let him ply his strong arms and skilled fingers with all his energy, study our ways, learn our language, be of us and with us, and we will be for him against the world.

There is, however, another immigrant who is not desirable. It is not so much his individuality that weighs against him as the circumstances that fling him, as it were, on our shores. He is the unfortunate wretch who, without choice or provision, is chased by starvation and immediate necessity, together with his more wretched family, into the crowded hold of a great steamship, to seek the market closed by a prohibitory tariff to the goods which he produced in his native land. He comes here, in most instances, seeking temporary relief from grinding poverty, with intention to return with his gain to the land of his birth. We have shut out the cheap foreign watch, blanket, tin sheet, glass pane, and steel rail; but the cheaper foreign worker, hand to hand with hunger, underbids American labor in the home market that we boast was made for it alone. We have reared around our custom houses, by our inhibition of foreign goods, adamantine walls high enough to stop the free movement of the winds of heaven, and deep enough to shut out natural gas or drinking water from Canada and Mexico; but around our immigrant depots, against the great swelling tide of immigration, we have strung a few statutory cobwebs!

However conservative one may be regarding sweeping tariffreduction, and however little in sympathy with radical opposition to moderate protection, yet he must concede that immigration and the tariff are closely interwoven and should be

considered relatively as affecting each other. In the holds of the ships from which we have excluded foreign freight humanity takes its place. If we wish to furnish a paradisaical home market to American labor, should we not follow a prohibitory tariff against foreign goods by a general exclusion law against foreign men? If we do not prohibit foreign workers, is it not a crime against our own people to mislead these aliens with the pleasant fictions intended for home consumption? Suppose it were stated by Italian immigration agents that it is made obligatory by law that every laboring man in the United States shall receive eight dollars for every eight hours' work, while, at the same time, laboring men in Italy are receiving eight cents per day and the price of passage in "tramp" steamships to this country is eight dollars. On this statement of the situation in a steamship advertisement, the numbers that would augment our industrial army from Italy would depend almost wholly on the capacity of the steamers and on the number of Italian workmen who could secure the passage money. Now suppose that on arriving here they should soon discover that indirectly there is collected from them every day as a tax on the necessaries of life, if they live as American workers do, seven dollars and ninety cents, giving them two cents a day to compensate for the radical change in their condition of life and for the difference between the climate of Pittsburgh and that of Palermo-would you be surprised if, thus disillusioned, vast bodies of them should swell the armies of the discontented, and, engaging in riot, should be shot down by private police or public militia?

In this discussion it must be remembered that electricity and steam, triple-expansion engines and fast express trains have combined to make the whole world very small and neighborly. These great, fast steamships rushing up our bay, swarming with human beings who crowd into our free labor market with pressing necessity forcing them to lowest prices, are boring holes with their twin screws in the logic of the McKinley Bill. "Well," say the advocates of the prohibitory tariff, "we will add to the laws that restrict immigration. We will have consular examinations of intending immigrants, or we will compel all candidates for admission into our country to speak the English language."

Aside from the facts that undue restrictions, such as linguistic tests, are not in keeping with American principles, and that consular examinations, unless an enormous clerical force is employed, are well-nigh impracticable, nothing short of exclusion, backed by an army of government detectives and a cordon of gunboats, will ever successfully keep out the tide which very high and stiff artificial barriers against the interchange of commodities are bound to create. The present law against certain classes of immigrants is, I believe, so far as the port of New York is concerned, well and zealously enforced, and yet those excluded are mere drops from the great sea which flows over our land.

If, for instance, the present prohibitory tariff should effectually close the American market to the product of the Welsh tin mills or of the Austrian pearl-button factories, the Welsh and Austrian operatives whose home manufactories would consequently be closed, and who would be forced to come to our "home market"—with intention to return home again as soon as possible, with some little resentment, perhaps, against us, and certainly with no love for our country—would perhaps meet the requirements of the most stringent restrictive immigrant law, and yet be a most undesirable addition to our population. Such an immigrant is forced to come; he comes sullenly and regretfully; he does not come intending to stay or to be assimilated: he comes under the pain and pinch of a necessity which our laws have forced upon him; he lands here generally with a family dependent upon him and with little or no means; and yet he is not a pauper within the meaning of the law. He lingers where he lands, unless an employer selects him from among the vast number of our own unemployed and pays his fare to a distance because, in the free and unprotected labor market, he has underbid the native workman. Frequently he becomes a chattel, a serf, with a number instead of a name, a piece of brutalized, degraded, human machinery, consigned in a freight car to some great corporation. Or, as in the case of the supposed Italian workman alluded to above, he has read on the dead walls of European cities the steamship advertisements in which, in the glowing periods and resplendent imagery of the "spellbinders" of our election campaigns, the Eden in which American working-

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men luxuriate is strikingly described; and he hastens hither, to be disillusioned and to join the growing ranks of the reckless and radically discontented. With our prohibitory tariff against goods, if we wish to repress the tremendous immigration of most undesirable elements, we must declare war not only against commerce, but against international comity, and arrest men as well as packs of sheep's wool, tin dinner pails, and coat buttons. Mr. Lodge, of Massachusetts, evidently appreciates, judging from the bill that he introduced into the last Congress, that our laws must be strong and stringent enough to stop men as well as packing cases on our quays.

A joyous shout went up from the chief advocates of the Mc-Kinley Bill, after its passage, when the cable brought news that Europe was filled with rumors of industries that had been ruined by the loss of their American market. Was that really good news for the American workingmen? Our law closes a European shop and throws out of employment thousands of workmen; with land monopoly, costly governments, dense populations, few opportunities for advancement, and a restrictive caste system, they have in many cases to choose between the poorhouse and the emigrant ship. That ship sails, in nearly all instances, to the United States, and her hunger-driven cargo-"the pauper labor of Europe "-is soon in sharp and deadly competition with the American workingman. Oh, but our dreaded rival, the foreign manufacturer, whom you must fear equally with his workmen—have we not put him out of our way? Yes, perhaps, but only to place him in a still more dangerous opposition to our best interests. He closes his factory, counts his gains, and goes neither to the emigrant ship nor to the poorhouse; but he invests his money in a syndicate to purchase American lands or industries, and lives contented and happy thereafter on the fruits of the labor of his American workers. He may curse and detest American institutions, but he must bless American money and consider that under a frowning front, after all, Mr. McKinley is his chief benefactor. American toilers on Illinois farms, on Wyoming cattle ranches, in Colorado mines, in California fruit plantations, in Oregon forests, and in industries generally throughout the country are "protected" against "the degraded serfs" of

Europe, while giving their hardest labor and best skill to benefit the detested foreigner against whom we inveigh during presidential campaigns. Is it a great national blessing when these gentlemen move their manufacturing plants to our country, bringing, despite our contract-labor law, a whole force of foreign workers, wrenched from their native land by the action of our tariff laws? Is their arrival a benefit to American labor? In some very highly protected occupations a considerable portion of the force consists of foreigners who followed a transplanted industry.\* But the American farmer feeds them and is benefited—how? His prices are fixed in the land they left, and he gains no money by feeding them in New Jersey instead of in Austria, Italy, Wales, France, or England.

It would be impossible, in the limits of this article, to set forth the startling figures of foreign ownership of American realty, industries, and corporate interests. The evils of this ownership are generally admitted by leading men of both political parties -such men as Senators Carlisle, Edmunds, and Reagan, Representatives Holman, Payson, and Oates, and many others. When this octopus of alien ownership, largely encouraged by our commercial warfare on mankind through abnormal tariffs, comes to fasten its tentacles on the land, the Republic will be in great danger. The small freeholder, the mainstay of American institutions, will then give place to the wretched dependent of a foreign landlord. That landlord may in time control his tenant's political actions; for the true sovereign is the lord of the land, the man who owns the soil on which others live. In that day our immigration bureaus will be spying out the foreign contract tenant, as well as the laborer.

There are so many ways of avoiding the foreign contract labor provision of the statute book, that at its best it can never be very effective. What contract is necessary to secure the services of an immigrant who comes to this country under inducement to work in the only industry where possibly he could secure employment? Suppose a European mill-owner should to-day address his assembled employees as follows: "This shop closes to-morrow, owing to the fact that the McKinley Bill has

<sup>\*</sup>See the reports of Congressional committees.

closed our market in the United States. Next week I open a similar establishment in New Jersey, ten miles from the landing-place in New York. Any of you who may emigrate to America will be given first preference for employment. Mr. Hurryem, our foreman, is agent for the Occidental Line of steamers and will give you easy terms." Let every man of them land in New York with five dollars in his pocket, and see the result, in spite of our most carefully devised restrictive immigration laws. Suppose that when they get to the transplanted mill they find the American workers on a strike against a sweeping reduction of wages; what clause of the McKinley Bill will protect these citizens from being supplanted by the invaders? As I write, the following cable dispatch may be seen in the newspapers:

"The effect of the McKinley Bill on the mother-of-pearl workers of Vienna has been serious. Official reports show that out of 6,000 only 1,500 are following their trade. The rest are making a precarious living as best they can."

"Making a precarious living"! Forty-five hundred Austrian fellow-men will soon be clamoring at the doors of the American button factories, and saying to the owners: "Let us in; lower than the lowest price you now pay for labor, we offer ours to swell your profits. Our scanty means, gotten in a 'precarious' way, are expended. The wolf is not at our doors (our only door is that of the almshouse), but he has already fastened his fangs upon us, our wives, and our little ones. We were happy in our native land; we loved our homes, our institutions, our traditions, customs, and habits; but you reached your powerful arm over the sea and took away our bread, and now, perforce, we stand here at your door and beg for work. We did you no harm in the dear old land we left; we ate your wheat and pork, and thought kindly of you and wished you well. We see your own workers here clamoring for work themselves; we are their brothers and do not wish to interfere with them, but hunger is cruel, and these women and children sitting here in your streets, dressed in heavy, honest, European woolens, are tired and hot and very weary under this American summer sun." This is not fancy. Read of the first fruits of a prohibitory tariff.

The Bureau of Statistics reports the total number of immi-

grants arrived at the ports of the United States during the periods named as follows:

	1890.	1891.
Month of March,	35,750	52,172
Three months, ended March 31,	64,021	86,048
Nine months, ended March 31,	254,403	316,237

I conclude that a very high or substantially prohibitory tariff in the United States is bound to force, in spite of all mere restrictive measures, a large, unhealthy, undesirable, abnormal immigration of those who care nothing, and desire to know less, about our citizenship, an immigration which is inimical to American labor and contrary to the best interests of the whole country. I conclude, also, that it will lead eventually to a dangerous alien ownership of American properties and to alien control of our industries and domestic commerce.

I am fully aware that those who prophesy that economic disaster will follow the violation of natural laws find little favor in our country, because the evils of vicious laws are not immediately apparent. Our country is young and strong and, as yet, robust. Like a strong, lusty young man it can break many of nature's laws with no immediate penalty; but outraged nature overcomes the greatest of giants unless reparation and amendment take the place of audacious and continued violation of her rules. The great steamships coming up New York Bay packed with human beings in all garbs, bearing the impress of all lands, speaking all tongues, whether coming here of free will or forced here with no will, are object lessons which cannot be ignored, and which may suggest thoughts of better things than extensions of the principle of Chinese Exclusion Acts or revivals of the absurd nativism of a past age.

WILLIAM McADOO.

## THE GREAT COUNT OF 1890.

On the first day of June, 1890, under a provision of the national Constitution, nearly forty-nine thousand enumerators began the great decennial work of counting the inhabitants of the United States; in cities and towns, on farms and ranches, in mining and lumbering camps, along railways and rivers, upon the shore, and high up in mountain ravines. It was the eleventh census. The first had been taken in 1790, the year after the formation of the government under the Constitution. The eleventh was, therefore, to show the changes of a hundred years—the first century of the nation's life. The occasion was one which should have been of the deepest interest to a great, free people.

The importance of the work would seem to have required that the enumeration be opened by a presidential proclamation, invoking the public attention, calling upon all citizens to aid the officers of the law, and demanding, in the name of patriotism and honor, that political and sectional passions and prejudices be laid aside while this great constitutional function was being performed. It is difficult to understand the failure, from the beginning, to usher in the national census in this way. When one considers what the census is to our people, that it is a condition precedent of our form of government, and that by it are to be apportioned both direct taxation and political representation, it would seem as if the mere proprieties of the occasion demanded an executive proclamation, even though no more of practical virtue were expected from it than is supposed to emanate from an annual proclamation appointing a day of thanksgiving and praise or one of fasting and humiliation. But when it is further considered that the census is pre-eminently a work which depends, for its integrity and efficiency, upon public interest and attention, and upon the cheerful co-operation of all classes of citizens and all sorts of people, the failure referred to becomes altogether inexplicable.

When first it was my fortune to be assigned to the superin-

tendency of the United States census, I besought the President to give to the opening of the enumeration the prestige and éclat of a proclamation. General Grant was not indisposed to do so, but the inexorable Department of State interposed its objection. There never had been such a proceeding and therefore there never could be. Reasons were nothing as against precedents; and so the great national canvass was allowed to begin with as little of ceremony and of observation as the annual peregrinations of a village assessor. Is it unreasonable to hope that recent painful experiences will effectually impress on the minds of our rulers the expediency of distinguishing this function as clearly as possible from the ordinary routine work of government, and of publicly invoking for it the good will and active co-operation of all?

The work of the eleventh census began, as was said, on the first of June. In cities the work was generally concluded within two weeks. In rural districts the enumeration was allowed to be protracted through the entire month. In many districts, however, here and there, the canvass, owing to accidents or to unforeseen obstacles, dragged on through some days or weeks longer. In a very few distant and difficult districts its completion was still further delayed; but on the 21st of October the last returns were received, and on the 28th of that month the census office announced the population as 62,480,540, exclusive of "Indians not taxed," according to the phrase of the Constitution. As the result of minor corrections, this total was subsequently changed to 62,622,250, which—whoever may be content or non-content—is destined to stand as the record for 1890.

The count of 1790 showed 3,929,214 inhabitants; so that in the past century the population has increased to nearly sixteenfold its original number. How far this increase has been out of the loins of the men of 1790 and how far it has been due to immigration from foreign countries, we may take another occasion to inquire. More marvelous even than the growth in numbers has been the spread of population westward over territory which was then an unbroken wilderness, roamed over only by savage beasts and savage men. The people of 1790 were found wholly in a narrow tract along the Atlantic shore, except where adventurous colonists, to the number of perhaps two hun-

dred thousand, had taken up lands amid primeval forests in the valley of the Ohio. The total inhabited area of those days may be roughly given as a quarter of a million square miles. To-day nearly a million and three quarters square miles are more or less densely covered by population. Then the average density of settlement was sixteen to the square mile. To-day it is nearly forty to the square mile, over a seven-fold area.

The moral and physical energy and courage, the intellectual activity and enterprise exhibited by the American people in thus overrunning and occupying, settling and cultivating a million and a half of square miles in the course of a single century, is absolutely unparalleled in the history of mankind. It stands, and will long stand, without a rival among human achievements. Think what it means! an average each year of fifteen thousand square miles—a territory larger than Holland, nearly as large as Switzerland with all its barren mountains! For each ten years a territory as large as Great Britain and Ireland combined, first entered upon, taken up, and annexed to the previously occupied and cultivated area! This story of the geographical process of the national growth is among the marvels of our race; and I confess it is to me not less a subject of admiration than the highest achievements in art, letters, and science, or in conquest and warlike enterprise. No other people could have extended settlement in so short a time over so vast a space. Any other of the great migratory races, Slav or Tartar, would have broken hopelessly down in the effort to compass such a field in such a term of years.

Unfortunately, the natural and proper pride and self-satisfaction with which the record of our first hundred years as a nation should have been made up, has been greatly impaired and diminished by grave and widespread complaints against the count of 1890. It is to these, rather than to gratulation over the undoubted results, that the present paper must be addressed. Certainly there was great popular surprise and disappointment over the announcement made from the census office in October last; and to many persons popular surprise and disappointment are evidence enough. But after a century of censuses we can hardly accept this sort of proof. Experience has shown that dissatisfaction may exist at its maximum where no good reason ap-

pears; and, again, that the gravest errors of enumeration may pass unnoticed. When the first census was taken, the people were wholly unreconciled to find that they numbered only four millions—indeed, not quite four millions; and Mr. Jefferson, then Secretary of State, in communicating the results to our ministers abroad, formally notified them that the returns were believed to be inadequate, and even kindly undertook, by "figures in red ink," to supply the deficiencies. Yet the course of the three or four censuses which followed showed conclusively that the census of 1790 was minutely accurate; so much so that it became, as we shall see, the base-line from which population could be unerringly projected for the next fifty years.

A census may be criticised in one or all of three different ways: First, this may be done objectively, by direct proof of its inaccuracy adduced from the outside, as when names of actual residents are shown to have been omitted in large numbers. Such proof may be furnished by another count if carried on in such a way as to be itself incontestable, or by bringing forward a multitude of well-authenticated individual cases of omission. Secondly, the census may be criticised by internal evidence, as when the schedules themselves show, upon expert examination, that they have been fraudulently or loosely made up; or as when the resulting statistics fail to agree among themselves, or fail to correspond to proportions which are determined by laws of population so well ascertained and so general in their operation that no large body of people can escape their control. Thirdly, the criticism may be by comparison with preceding and succeeding censuses, as when an enumeration fails, in a degree not to be accounted for by any temporary causes which can be adduced, to take its due place in the series. An illustration of this last method is furnished by the ninth census, which passed without any general adverse criticism at the time, but which the census of 1880 proved to have been in error to a large extent through the southern States.

Direct external evidence against the general integrity of the census, throughout a country so broad and of such widely varying conditions as the United States, is not easily obtained, even if it could be had at all, in the degree which would be necessary

to condemn the work as a whole. The results of an enumeration carried on over an extended district are not homogeneous. They must differ somewhat in quality—and they may even differ widely—without, perhaps, much blame except in the very worst cases. Hence such a work cannot be appraised by tests applied at random. No matter how well the work in general may have been done, bad spots can always be detected, here and there, by searching scrutiny. On the other hand, against the widest dereliction from duty the conscientiousness of individual supervisors or enumerators will erect a barrier. Not only does the "personal equation" of enumerators and supervisors thus constitute the enumeration of each district, to a certain extent, a thing by itself, but the special liabilities and difficulties of individual districts and regions are such as necessarily to cause great differences in the degrees of accuracy which can possibly be attained. There are rural communities in which it would be inexcusable for a census-taker to omit a single person among five hundred or a thousand. There are other communities in which it would no more be possible for a census-taker to secure the name of every resident than it would be for an accomplished angler to catch the last trout in a stream. Since, therefore, a census is never all good or all bad, it cannot be judged as a whole by the number and kind of tests which the heedless, impatient character of our people will be likely to cause to be made. Especially when such tests are applied at the instance of aggrieved municipalities, or are carried on in a partisan spirit, are they unlikely to do more than render the public mind uneasy and dissatisfied, without affording any measure of the degree of error, or even proving that the census as a whole is defective.

The most important instance of an attempt to secure external evidence against the eleventh census is afforded by the painful case of New York City. It will never cease to be a source of regret that the administration at Washington did not take the initiative in this matter and direct a re-enumeration, as was done in the case of both New York and Philadelphia in 1870. Such a course would have delayed for a few weeks the final announcement of the result for the whole country; and might, in consequence, have prevented the reapportionment of representation

in Congress during the last session. But this would not have been a high price to pay for setting at rest the complaints—whether well founded or ill founded—of the press and the municipal authorities of New York, and for saving, to a great extent, the prestige of the whole census. As it is, the record is made up with a very unhappy state of things: a national enumeration which credits the city with 1,515,301 inhabitants, and a police count 197,000 in excess. Such a contradiction in terms, whatever value one may attribute to the enumeration under municipal authority, cannot fail permanently to impair the satisfaction felt in the centennial canvass of the country.

It is not possible to explain away the difference. It is true that the police count was made at a time when tens of thousands had returned to the city from seaside and mountain. It is true that the police count did not refer back to the census date, June 1, and that the large natural growth of the city during the interval, amounting to some thousands each month, was included in the later enumeration. It is true that the foreign arrivals at the port during the autumn were extremely heavy, and that an unusually large proportion of these stayed in the city. But after all reasonable allowance has been made on these accounts, there remains an enormous difference, which can only mean that one or the other of these enumerations was inexcusably wrong. Either the census officers throughout large districts did their work with culpable negligence, or else the police who were set to follow them made their canvass recklessly and wantonly, counting people at their places of business and again where they lived; counting not only the guests at hotels (most of whom had their "usual place of abode" away from New York), but including the guests of many successive days; counting residents of New Jersey and Brooklyn trading or working in New York; counting anybody and everybody whose name they could secure. One or the other of the two censuses must have been in the wrong in the ways and to the degree indicated.

As between the two enumerations thus strongly contrasted, the presumption is, on general principles, in favor of that conducted by the general government. Police censuses and school censuses have often been shown to be untrustworthy. The ways of inflating a census are so many, and all of them are so easy, and the examples of St. Louis, Minneapolis, and St. Paul exhibit so strikingly the passion for exaggerating population for local prestige, that no statistician of experience would be willing to stake much upon such a count unless he had watched it in progress and had seen that its spirit and its methods were not those of an enumeration gotten up to show the largest results possible. On the other hand, it is to be said that a census of New York City at the best constitutes a most difficult problem, calling for the highest order of intelligence, energy, and foresight on the part of those who organize and supervise it; for the utmost care, deliberation, and conscientious earnestness on the part of those who are to do the work of finding and recording the inhabitants of the several wards and districts. Otherwise there will inevitably be large omissions from the count. In comparison with such a task, a census of Philadelphia is child's play. There we have a city openly built, with ninety houses to every hundred families. Tenement houses are rare. Few of the people sleep in stables, in cellars, or in lofts. The houses are set squarely on the street. Four fifths of the inhabitants are native born, and all but a trifling percentage are of English speech. Merely to state these facts is, to one who knows anything of New York, enough to show the difficulties of enumeration in that city, which in 1880 had for 243,157 families but 73,684 dwellings, of which perhaps 20,000 were tenement houses within the meaning of the sanitary acts. New York is a city with crowded and crooked courts and alleys in the lower parts, and with thousands of shanties, sheds, and inhabited sties in the upper parts, and its population is almost equally divided between natives and foreigners, no small proportion of the latter element using languages other than English —not merely the more or less familiar German and French, but Slavic and even non-Aryan tongues.

With such constituents and under such physical conditions, New York affords far the severest test to which the census is subjected. Here is the field on which a capable superintendent may exert all his powers and yet not do the work altogether to his own satisfaction, perhaps not at all to the satisfaction of the metropolitan newspapers. Under such imminence of hostile

criticism, no care, no pains, no expenditure can be too great for the due preparation and conduct of the enumeration of the first city of America. For the same reason, however, that makes a comparative failure of the enumeration in New York City not unlikely to occur, a certain degree—not extravagant—of failure there could not be held to establish a presumption against the census in cities better adapted to enumeration, or even to raise doubts concerning it. Bad work, however—decidedly bad work in New York—must raise such doubts and may establish such a presumption. Yet, in spite of doubts or hostile presumptions, it might still be true that while the census of New York, owing to the mysterious appointment of an incapable or negligent supervisor, was wretchedly taken, in the remaining one hundred and seventy-four supervisors' districts the work was fairly well done, perhaps better done than usual.

Excepting in the case of New York City, I am not aware that more has been offered in the way of external evidence against the eleventh census than is likely to occur in connection with any popular enumeration. The newspapers have contained the usual number of complaints from cities which have highly inflated ideas of their own importance—especially cities which are under the exhilarating influence of real-estate "booms"—and the usual number of letters from householders, declaring that their families have been passed by in the enumeration. Experience has abundantly shown that such complaints from aggrieved municipalities do not even constitute a kind of evidence; while of such letterwriters, generally two thirds, often four fifths, sometimes nine tenths, are duly recorded in the census, the required information having been given, with less or more of exactness, by members of the family in the absence of its head, by servants in the absence of the family, or, in the absence of both family and servants, by neighbors, the corner apothecary, or the domestic green-grocer.

Internal evidence against the eleventh census is not yet accessible in any considerable degree. Although the work of compilation and tabulation at Washington is going forward with unprecedented energy and expedition, it must be many months before the complete results will be in the hands of either the champions or the critics of the census. When that time shall

come, a great deal of ingenuity will doubtless be employed in drawing from the tables of age, sex, race, nativity, etc., evidence to invalidate or to corroborate the count of 1890.

Lest any of my readers should fail to understand how such evidence can be applied, I will offer a single illustration. As we shall see at a later period in this paper, the eleventh census can be held to be a true count upon one condition only, namely, that it shall appear that the general birth rate has been diminishing during the decade. With the number of people resident in the country in 1880, and with the number of foreigners arriving since that date, the population of 1890 must, had its previous rate of natural increase been maintained, have far exceeded 62,-500,000. Here we see the way in which the census, if grossly imperfect, will be compelled to furnish the material for its own condemnation. Should the proportion of the total population under ten years of age be the same as it was in 1880—namely, 26½ per cent.—the census will be discredited. With all who survive from the fifty millions of 1880, with all who survive from the five and a quarter millions of foreigners that have come into the country during the decade, and with sixteen and a half millions of children under ten years of age, the total of sixty-two and a half millions for 1890 cannot be correct. Should, on the other hand, the falling off in the birth rate during the past decade prove to be such as corroborates the census, it will still be most interesting to note two things: 1, whether the retardation of the birth rate has extended geographically, westward and southward; 2, whether it has included the foreign as well as the native element. The foregoing is but one of several tests, more or less searching and conclusive, which the compiled statistics will afford the means of applying to the eleventh census. For these, however, we shall have to wait some time.

The more usual resort of those who would inquire as to the accuracy of a popular enumeration, is to the line of population as projected from the course of preceding enumerations. This has been the argument of the New York "Nation" and "Evening Post" in their unrelenting attacks upon Mr. Porter's count. These papers have not ceased to say that the census of 1890 must be wrong because it does not fairly correspond with the re-

sults of previous censuses, allowance being made for every known force operating within the field. A census of France which should show a large increase of population would be on that account suspected, because population in that country has made but slight gains during this century. A census of the United States which does not show a very large increase of population becomes on that account suspected, because the course of population here has been upward at a very high angle. The question is of such great statistical interest and political importance as to require us to go back to the beginning and trace the line of ascent from 1790 to 1890.

It has been said that the first census of the United States showed 3,929,214 inhabitants. The second census discovered a population of 5,308,483; a gain of 35.1 per cent. In 1810 the population reached 7,239,881; a gain of 36.38 per cent. in the decade. Taking these figures, Mr. Elkanah Watson, about 1815, constructed a table of the probable future population of the United States, which for the next four censuses showed a marvelous correspondence with the ascertained results, as will appear by the following table:

	1820.	1830.	1840.	1850.
Watson's Estimate,.	9,625,734	12,833,645	17,116,526	23,185,368
The Census,	9,633,822	12,866,020	17,069,453	23,191,876
		0 - 0 -	1 474 0740	
Watson's Error,	-8,088	-32,375	+47,073	-6,508

What was it that enabled a prediction to be made so close as almost to savor of magic? Here was a man computing the population of his country, not to within ten, or five, or three per cent., but to within one fourth part of one in a thousand; doing this thirty-five years in advance, when far more than two thirds of those who were to constitute that population were yet to be born, and when one half of the marriages from which such births were to result were yet to be contracted, not to speak of court-ships to be conducted and acquaintanceships to be formed! Yet there was nothing especially deserving admiration in Watson's predictions. The author had no grasp upon the future beyond what other men possess. His estimates were not even based upon a careful survey of the soil and climate of the country. That which caused the growth of numbers through the earlier decades

of our history to be so strikingly uniform was the principle of population operating absolutely without check among a people spread sparsely over the soil, with little of wealth and little of extreme poverty, and with nothing to make child-bearing a burden. Under conditions like these, population increases at a geometrical ratio as regularly as a gas expands in a vacuum.

About 1850 great and momentous changes began to appear in the social and industrial life of the American people. Manufactures on the large scale were introduced, creating vast factory populations. Commerce began to build up great cities. The gold discoveries in California and Australia began to work changes almost as great as those wrought by the silver mines of Mexico and Peru three centuries before. The distinction between the very rich and the very poor appeared and became constantly aggravated. Fashion inaugurated its reign; luxurious habits and tastes spread rapidly; the integrity of the American family was impaired and the vice of "boarding" grew fast by indulgence. In 1861 the civil war broke out, checking population by its first effects, and by its subsequent influence magnifying all the causes that have been indicated. Finally, vast hordes of foreigners began to arrive upon our shores, drawn from the degraded peasantries of Europe, accustomed to a far lower standard of living, with habits strange and repulsive to our people. This again caused the native population more and more to shrink within themselves, creating an increasing reluctance to bring forth sons and daughters to compete in the market for labor.

Let us now see how the validity of Watson's further estimates was affected by these changes:

	1860.	1870.	1880.	1890.
Watson's Estimate,.	31,753,824	42,328,432	56, 450, 241	77,266,989
The Census,	31,443,321	38,558,371	50,155,783	62,622,250
Watson's Error,	+310,503	+3,770,061	+6,294,458	+14,644,739
The Census, Watson's Error,				

Watson's final estimate—that for 1900—was 100,235,985. It now appears probable that this will prove to be in excess of the enumerated population by more than twenty millions.

Let us follow this rapid sketch of the movement of population in the United States with a table showing the gain, per cent., for periods of ten, twenty, and thirty years.

Year.	Population.	Increase Per Cent.		
1ear.		In 10 Years.	In 20 Years.	In 30 Years.
1790,	3,929,214			
1800,	5,308,483	35.10		
1810,	7,239,881	36.38	84.26	
1820,	9,633,822	33.07	81.49	145.19
1830,	12,866,020	33.55	77.72	142.38
1840,	17,069,453	32.67	77.18	135.76
1850,	23,191,876	35.87	80.26	140.73
1860,	31,443,321	35.58	84.21	144.39
1870,	38,558,371	22.63	66.26	125.89
1880,	50,155,783	30.08	59.51	116.26
1890,	62,622,250	24.85	62.41	99.16

The first glance at the foregoing table raises suggestions which are not favorable to the census of 1890. Why should the rate of increase by ten-year periods have fallen off from 35.58 per cent. between 1850 and 1860 to 22.63 between 1860 and 1870, to rise again to 30.08 between 1870 and 1880? "On account of the war," is the natural answer. Yes; but if so, why should it have again fallen to 24.85 between 1880 and 1890? To this inquiry the census office replies by alleging that the census of 1870 was defective. So much is admitted; the degree only of that deficiency is a matter of dispute. The census office estimates the deficiency of 1870, roundly, at a million and a half. If this were so, the series would be reasonably self-consistent, as follows:

Decade.	. Incre	ase Per Cent.
1860-70,.	 	27
		25
1880-90,.	 	25

I am not disposed to admit that the deficiency was nearly so great as this. But whether we take it to have been a million or three quarters of a million, the correction for 1870 will largely remove the statistical irregularities noted in the ten-year series.

But there is a better way of dealing with the question. The advantage of taking twenty-year or thirty-year periods is that this enables us to jump completely over a suspected or contested census. Whatever we may think of the census of 1870, it is not disputed that the population of the country increased only 116.26 per cent. between 1850 and 1880. It is with this ratio that we should compare that of the thirty-year period between 1860 and 1890, when the gain was 99.16 per cent. It is true that the fall-

ing off here was much greater than between the two thirty-year periods 1830-60 and 1840-70. But since it is admitted that a large addition, somewhere between three quarters of a million and a million and a half, requires to be made to the population of 1870, we find this irregularity to be measurably accounted for, and the series, thus corrected, to be, for the last four censuses, tolerably self-consistent. Thus, if we suppose the population of 1870 to have been 39,300,000, we should have the last four thirty-year periods as follows:

Period. In	crease Per Cent.
1830–60,	144.39
1840–70,	130.23
1850–80,	116.26
1860–90,	99.16

There is, however, one important fact, not appearing in the foregoing table, which dashes our satisfaction at this result, and throws the whole matter again into doubt and dispute. That fact is the enormously increased immigration of the period from 1880 to 1890. Foreign arrivals during that decade were about five and a quarter millions, or twice as much as during the immediately preceding or any preceding decade. This is the element not, as yet, accounted for in the eleventh census. This constitutes the real gravamen of the hostile charges against that census. Had the foreign arrivals of 1880–90 been only as great as those of 1870–80, the result for 1890—namely, 62,500,000—would have been perfectly reasonable on its face, and, in the absence of internal or external evidence, incontestable. But since those foreign arrivals were two and a half millions more, why was not the population of 1890 greater by that amount?

Here appears the significance of the condition mentioned in the earlier part of this paper. If the birth rate among the previously existing population did not suffer a sharp decline coincidently with that enormous increase of immigration, and perhaps in consequence of it, the census of 1890 cannot be vindicated. To ascertain the facts we must await the tabulation of the population by periods of life, and ascertain how many of the inhabitants of the United States in 1890 were under ten years of age.

FRANCIS A. WALKER.

## OUR CHANCE FOR COMMERCIAL SUPREMACY.

RICHARD COBDEN, the merchant statesman of England, warned his countrymen more than fifty years ago that a nation was growing up on the North American continent which, through the unequaled natural resources of its land and the intense energy of its people, would supplant England in the primacy of the world's commerce. Is this prophecy to be fulfilled, and when?

Hitherto this nation has been very busy subduing a virgin continent—perhaps the most desirable part of the world for human habitation. Our people have built nearly 170,000 miles of railways, over which 30,000 locomotives move 1,000,000 cars carrying nearly 600,000,000 tons of merchandise quickly and economically, while 500,000,000 passengers travel with a comfort and cheapness unknown in other countries. They have developed the full usefulness of the natural waterways by a lavish expenditure, and have made artificial channels which are the arteries of a great traffic. They have pushed the commerce of the great lakes with such energy that more than 10,000,000 tons of merchandise arrive at and depart from the port of Chicago during the season of navigation, while the tonnage passing through the Detroit River is nearly thrice that passing through the Suez Canal. They have spent money extravagantly to improve the harbors of both coasts, and through these gateways go in and out the novel steam and sailing craft of a great coasting fleet, moving vast quantities of merchandise from port to port. They have perfected a superb system of lighthouses, have minutely charted our extended coast line, adding greatly to the safety of navigation, and have established a life-saving service that is a model for other nations. They have made equal progress in providing for the transmission of intelligence; for the telegraph conveys, over 800,000 miles of wire, the written word to every hamlet, and the telephone exchanges speech over ever-widening

areas. Most of the good soil is now in the service of man; the forests are almost vanquished, and, alas! have almost vanished. The riches under the surface have been sought as eagerly as the riches on it, and our mines, both in useful and in precious products, stir the wonder of the world. Our manufactures, aided by the enterprise and ingenuity of the people, have been multiplied and differentiated until, in many fields of production, six months' work of existing factories is enough to supply our own people for a whole year.

All this serves to show that the commercial unity of the nation is nearly complete. The task of perfecting it has called for the highest energies of a free community, living in a stimulating climate and reinforced in bodily and mental strength by the constant inflow of the more enterprising of the plain people of Europe, who have come here in millions and have merged themselves in these enormous activities.

While we have been building a nation and a home for it, foreign commerce has been naturally secondary, although by no means neglected. During the year 1890, the country exported merchandise valued at nearly \$900,000,000. Much of this consisted of raw materials and food supplied to manufacturing nations, but more than \$150,000,000 in value was manufactured goods. Of the food exported, more than \$200,000,000 worth, such as flour and bacon, had been subjected to manufacturing processes, and the \$22,000,000 worth of lumber, staves, etc., which represent the plunder of our forests, had all been partly elaborated. Large as these figures are, they seem small by the side of those that tell the story of Britain's exports of more than \$1,500,000,000,000 in value, of which more than \$1,000,000,000,000 worth consist of manufactured goods, the products of British factories.

There are signs that our country is awakening to a sense of its position among the manufacturing nations as first in activity, wealth, and population. It is beginning to recognize that the 1,300,000,000 people outside its own boundaries represent a vast potential commerce, and that 1,000,000,000 of them live in non-manufacturing countries. The nations of Europe have been struggling for this trade, fully aware of the enormous value of

the commerce which has built up the wealth of England, but they have been handicapped and unable to make a winning fight against that powerful and astute adversary. There are many evidences that we are about to enter this field of peaceful combat. One such sign is our strong interest in the creation of a new navy which shall constitute a visible symbol of power abroad. As has happened before in the history of our country, after a long period of indifference and inaction, we leap to the front in the fighting effectiveness of our ships. Fortunately we possess a superb corps of naval officers, and it is certain that the new and complex fighting machines will be handled with brayery and skill in time of need. To construct a new navy from American materials required a great development of our steel factories. Its founder, Secretary Whitney, skillfully applied the liberal appropriations, private enterprise responded, and steel of the highest grade is now available in ample quantities for the construction of hulls and for the manufacture of armor plates. great gun factories at Washington are to-day turning out the most powerful cannon known, and private firms are entering the same field. Foreign commerce is almost the only source of international complications for a country free from dynastic and colonial questions, and the new attitude brings its own peril, which in part is provided against by the new navy.

The course of the United States in the Samoan matter, in throwing down the gauntlet to powerful Germany, created a profound impression in Europe, where it was rightly regarded as the indication of a changed attitude. The interest aroused by the apparently futile Pan-American Congress, the prompt and general approval of Secretary Blaine's reciprocity movement which grew out of it, the dispatch of our army and navy officers to the wilds of the Andes to begin the surveys for the Intercontinental Railroad, and the report by a Senate committee looking toward the control of the Nicaragua Canal by the government, all proclaim that the United States is awakening and is about to begin an aggressive movement in the campaign of commerce.

What are the elements of strength that make victory probable? The vividly energetic character of the people, educated

in activity by a commerce unobstructed over a continental area, gives promise of a momentum hard to resist. The American celerity of thought and tendency to prompt action, the spontaneous ingenuity in adapting means to ends, in seizing every new discovery and elaborating it for the uses of man with bewildering swiftness, all make for continuous and rapid progress. The recent expansion of the uses of electricity is a striking example of this. Potentially every American is an inventor, always searching for a better way.

One great factor in the commercial preponderance of England was her supremacy in iron-production, coincident with the carriage of the products of all countries over iron rails on land and in iron ships by sea. When the age of steel arrived, England still held the first place for a time, but with the partial exhaustion of her ores and coal, and with the opening up of our unlimited supplies, she has dropped to the second place, while the United States has seized a supremacy never to be relinquished. With increased production comes lowering of cost. Already prices here are nearly the same as in Britain, and soon iron and steel will be sold cheaper in the United States than in any other country in the world. The cheapness of these metals has meant commercial supremacy for Britain; it should mean the same for the United States.

Thirty years ago this country had to pause in its progress to extirpate an evil and to vindicate a principle. One consequence of this was the loss of a large part of our merchant marine, and since then we have carried on but little of our foreign commerce under our own flag, although our domestic fleet is large enough to make us the second maritime nation in the world. But when iron and steel shall be cheaper here than elsewhere, the great ship-building industries will, in accordance with economic laws, transfer themselves from the Clyde to the Hudson, the Delaware, and the Chesapeake. Already our ship-building firms have offered to duplicate ocean greyhounds at British prices, and during 1890 English ship-building slightly declined, while the United States built 25 per cent. more tonnage than in 1889. While building our merchant fleet, we need not relax our efforts to secure the world's trade. We can use foreign vessels to carry

our shipments. Doubtless we shall find, as the British have found, that the profits of a merchant marine must be largely collateral—made upon the goods carried rather than upon the carrying. We are helped, in pushing our manufactures, by the foreign belief in the superior quality of our goods; the word "American" has become a valuable trade mark, and the foreign buyer has confidence in the products of our factories. Americans as a rule make things on a great scale, and arrive at cheapness by producing enormous quantities. The tendency to uniformity in dress and in methods of living, which is a characteristic of the age, thus makes in our favor.

. Ships carry our merchandise, but they are far too slow as vehicles of information. The value of time and the uncertainties of the mails have forced the construction of a vast system of submarine telegraphs connecting every point of commercial importance with every other such point. Ten cables lie in the bed of the Atlantic between Europe and America. The West Indies are linked together; loops lead from port to port almost around South America and the great African continent. Cables stretch across the Mediterranean and lie at the bottom of the Red Sea. They tie Arabia, India, China, and Japan together; they unite the great East Indian islands, and stretching southward, bind Australia and New Zealand to the rest of the world with double lines. Over these cables come and go the messages by which the business of buying and selling is done. Most of them are the work of British capital, but they are all at our service. The electric messenger has eliminated time, while the railway and the steamship are steadily lessening the distance between nations and so are drawing us to other lands and them to us. The closeness of competition and the nearness of each to all are destroying the profits of secrecy and forcing unnecessary middlemen out of the way. The tyranny of commercial "use and wont" is giving way in many directions, and the time seems ripe for a new-comer with new methods, who shall see that the larger profit is in making smooth the path between producer and consumer rather than in keeping them as far apart as possible. That new-comer is the United States.

In the commercial war upon which we are entering, these

many advantages are partly offset by disadvantages which should not be overlooked. For many years we have not only failed to fight for foreign trade, but we have defended ourselves behind tariff fortifications against the attacks of other nations. We have a banking system in which the original desire to market government bonds during the civil war, and later the effort to make a secure circulating medium, have surrounded our banks with hampering laws and customs which make them poor channels for financing a foreign trade. This is a serious difficulty, but it is not to be supposed that the large profits and the safety of such banking will be long ignored. At present we have the gold standard, which is the most efficient tool of foreign exchanges, but we seem to be threatened with unlimited silver coinage, and with the resulting silver standard, which might greatly retard the development of foreign trade.

Our principal enemy is Great Britain, and she is a dangerous adversary. Her commerce is superbly organized, and she has the habit of victory. For a long time she has fought without tariff fortifications; her ports have been open to the ships of all nations, whether for foreign or for coastwise traffic; she gives her competitors the same advantages in trading with her colonies that she herself possesses. This is a fine attitude and shows her solid confidence in herself; yet she dreads the conflict; and while she shows a courageous front and will fight at every point, many of her intelligent observers anticipate ultimate defeat.

Germany is a foe of far different resources. A poor country, burdened with an enormous army, and thus obliged to lose the labor of vast numbers of her citizens in order to provide for defense, she has little leisure to originate and has spent too much of her energies in imitating the goods originated by others. An imitation is salable only when it is cheaper than the original, and under the disadvantage of badly paid and less intelligent labor, she has produced so many inferior goods that the word "German" stands for poor quality in the minds of many buyers. The idea is spreading over the world that poor goods are dear goods, as is shown by the enforcement of international regulations to prevent the imitation of trade marks, and by laws exacting that the nationality of merchandise be indicated on the

merchandise. It must not be understood, however, that Germany produces no manufactures of high quality; there are some fields in which she stands unrivaled, and with all her disadvantages she exported more than \$750,000,000 worth in 1889.

France also fights at a disadvantage. The taxation necessitated by an army of revenge and by the greatest debt in the world weighs heavily, and this weight is aggravated by the forced withdrawal of many of her people from production. is further hampered by government paternalism, which meddles with trade and destroys commercial initiative. Her exports, valued at more than \$700,000,000, are a monument to the indomitable industry of her people, but she is driven more and more into those kinds of manufactures in which she can show her unrivaled taste. France shows a great dread of American aggressive competition, and seems to have little hope of combating it successfully. These three great manufacturing nations will serve as types of the enemies and the resources against which we are to contend. Switzerland and Belgium resemble England in their methods; Austria is like Germany; Italy and Spain are more like France.

In beginning the campaign for the world's trade, we first throw up outworks around neutral markets in the shape of reciprocity treaties. We naturally begin with the nearest country.

Canada has been offered unrestricted reciprocity; she is already willing to come half way. The opposition of the Dominion alone prevents the promulgation of a treaty with Newfoundland. The British West Indies are connected with the United States in the most intimate way, and British Guiana has expressed her preference for reciprocity with the United States rather than for closer relations with Canada.

Cuba and Porto Rico demand from Spain reciprocity treaties with the United States, and the mother country sees herself obliged to consent. Mexico long since agreed to a treaty which has not been ratified by us, and she is now negotiating another, but meantime she is being commercially annexed by our railroad-builders and merchants. The Nicaragua Canal will give us a preponderance in Central America and the advantage of easier access to the western coast of South America and to all the

Pacific regions. We admit most Venezuelan products duty free, and the successful conclusion of a reciprocity treaty will still further increase a trade that is already growing rapidly. On April 1 the reciprocity treaty with Brazil went into operation. It cannot fail greatly to stimulate a trade already growing and important, and the bitter opposition of the merchants of competing nations is a proof of its value. When we are ready to remove the duty on wool similar treaties can perhaps be negotiated with the countries of the La Plata valley, where American manufactures are already well known and liked.

The new Commonwealth of Australia, the greatest consuming nation in the world in proportion to population, has always preferred quality to cheapness and is one of our best customers. Whenever our people are ready to admit her wool duty free we can rest assured that she will grant a generous trade equivalent. British South Africa has long bought many goods from the United States, but asks free entry for her wool before she will grant us favors. Her ports are the gateways to the great African gold fields and diamond mines. Her railways are pushing for the heart of Africa, and already reach long distances from the coast.

After operating for a time in the shelter of the reciprocity breastworks, our people may discover that these breastworks hamper rather than help them in a further advance. They will learn how much the enemy fears them, and, gathering courage, will move out into the open field of the neutral markets. The struggle there will be a severe one, but it is difficult to see how, with our resources, we can fail of ultimate success. Meantime many of the manufacturing nations, beaten out of the field, will have retired behind tariff fortifications which they will construct around themselves and their colonies. The final advance must necessarily be against these defensive walls. The attack is likely to be a prolonged siege, in which keeping them inside will be in itself a victory. In such a campaign leaders will arise. These generals of commerce may come from among the men who built a Chicago, a Denver, an Atlanta, rather than from cosmopolitan New York, keen Boston, or peaceful Philadelphia. The campaign is likely to be most successfully carried on by men of the

loose-jointed power and broad optimism of the Mississippi valley rather than by the highly organized but more cautious leading of the seaboard. The merchants and manufacturers of the coast are perhaps too conventional in their methods; they have been forced to fight defensively too long to lead where broader and bolder action might best succeed. The commercial generals must be Lincolns and Grants; patient, constant, enterprising, and imbued with an absolute confidence in themselves and in their highly-organized, highly-paid armies of workmen. Such confidence seems warranted. The men of our industrial armies possess an educated intelligence; they know how to harness the forces of Nature and to compel her greatest energies. They are weaponed with machines and tools so ingenious, so perfectly adapted to their uses, as enormously to increase the effectiveness of labor; they can move quickly, for they carry no burden of clumsiness or surplusage, they bow to no useless traditions and reject nothing because it is new. How can such armies, when backed by the resources of such a country, fail of victory?

The fruits of victory are worth considering. We shall have a trade that will fill the country with factories, and owing to the wide distribution and climatic differences of the world's markets, there need be no periods of idleness for workmen. The Russian oil fields threaten to destroy our exports of petroleum to the Eastern hemisphere; our shipments of lumber must soon cease from exhaustion of our forests; experts tell us that our food exports steadily decline, and that by the end of the century we shall need nearly all our wheat for home consumption. As a result of the campaign, this void will be filled by shipments of a wonderful variety of merchandise in which the smallest part of the value is that of the raw material, the greatest, that of skilled and intelligent labor. Great Britain sold in 1889 more than \$300,000,000 worth of goods produced by other countries, while we sold but \$13,000,000 worth. With the transfer of commercial supremacy, much of this valuable and profitable trade would come to us. The steadily-increasing importance of New York as an international financial center will be stimulated, and the first general European war will see the transfer of the world's surplus capital from London to New York. Thus we shall, if

we remain financially spotless and trustworthy, become the world's savings bank and safe deposit.

Beyond the material benefits arising from commercially organizing the world around a new center, are other gains. The public business of the nation is generally carried on by secondrate men, for those of the first ability find a more attractive field of action in private affairs. Perhaps, with the larger leisure to come, first-rate men may be drawn into the making of the laws and the guiding of the state. So far there has been little original artistic progress, except in the work of our machinists and engineers, who strip away unnecessary material, the result being artistic perfection of form. When commercial ambitions are satisfied a new desire may arise for primacy in art. Close commercial intercourse with the artistic civilizations of Asia and Europe will have acquainted us with the achievements of these countries and will have created ideals which our people will set themselves to realize. Some profound changes in national character may be looked for. The qualities that have well served to overrun the world may become secondary to others necessary to the preservation of our great place among the nations. Breadth of mind, the outcome of world-wide interests and sympathies, may replace intensity. The calmness that comes with success and possession may overshadow the eagerness of pursuit; swift aggressiveness may be succeeded by weight and steadiness; and the complexity of affairs will stimulate mental subtlety.

The people who shall have won such victories will have become intellectual athletes, for the contest will exact the full development of every power. The fittest qualities for permanent dominance, gained from the mingling of the blood of all the nations of Europe, will have survived. Then from this nation, strengthened in character, trained in intellect, and elevated by these great events, may be expected works of genius in all the arts, and a literature of fact and imagination such as the world has not yet seen.

ULYSSES D. EDDY.

## SILVER, AND THE NEED OF MORE MONEY.

More money is a necessity. If any one doubts this, let him read an article on the money market in any leading journal in Europe or America, or apply for a loan at any bank on either side of the Atlantic. The constant and increasing stringency in the money market is the text of financial literature, the banker's reason for refusing accommodation on good security, and the miser's excuse for sacrificing his debtor's property at forced sale. The limit of the supply of gold for use as money has been reached. The question under consideration on both sides of the Atlantic is: What other material besides gold shall be stamped as money of redemption?

From time immemorial, previous to 1873, silver was used as money equally with gold. Silver was excluded from the mint by legislation. Shall it be restored to its place as money by legislation? If not, the alternative is presented of the gold standard and perpetual contraction, or fiat paper money. The gold monometallists assert that the subject cannot be controlled by legislation. Their spokesman, Mr. Edward Atkinson, in the May number of the FORUM, boldly asserts that "the value of gold and of silver in the markets of the world is a matter that it is wholly without the power of the government to control or to regulate."

Mr. Atkinson's assertion will hardly convince the people that universal peace and abundant harvests produce scarcity of money, depression, and want; but it ought to satisfy them that it is idle to expect relief from the gold monometallists. If it be true, as contended by Mr. Atkinson, that the repeal of all laws providing for the coinage of the precious metals and the enactment of statutes depriving coin of its legal-tender function would not affect the value of either gold or silver, what becomes of the economic axiom that value depends upon the law of supply and demand? The demand for gold and silver for use as money is

more than nine tenths of the entire demand for those metals. Why would not the cutting off, by legislation, of nine tenths of the demand for the precious metals depreciate their value? Has either gold or silver intrinsic value independent of supply and demand? If all the rocks were gold, would an ounce of that metal buy the same amount of food or clothing that it now does?

Those who attribute intrinsic value to gold mistake quality for value. Quality is inherent and intrinsic; value exists in the mind of man and is extrinsic, and, in a great degree, independent of quality. The heat of the sun, the light of day, and the air we breathe possess qualities essential to animal life, but in their natural condition they have no commercial value. A traveler at a mountain stream satisfies his thirst without cost, but in a desert he would willingly exchange his last dollar for a pint of the precious fluid. The only elements of value are desire to possess and the limitation of quantity; in other words, supply and demand. The value of gold and silver, when used as money, is their purchasing power, or their power in exchange. If the quantity were increased, the demand remaining the same, the value of each dollar, pound, franc, or other unit of money would be correspondingly decreased. Why did silver decline in value as compared with gold, when its coinage was prohibited by law? When the gold mines of California and Australia were most productive, Germany, Austria, and Holland demonetized gold. Chevalier, Maclaren, and others advocated an international agreement to reject gold and to adopt the silver standard. If they had succeeded would not the value of silver have advanced as compared with gold?

The principal use, aside from habit, custom, or prejudice, for either gold or silver as money is to limit the quantity of the circulating medium. Without limitation in quantity, as we have already seen, money would have no value. So long as no other limitation can be agreed upon, a metallic basis for money of ultimate redemption is a necessity. The question is, Shall such basis be gold alone, or both gold and silver? If there were enough gold, there would be no necessity for using silver; but there never was enough of either gold or silver. There never was too much of both combined.

The most serious objection to metallic money is the want of a sufficient supply. In the past, nations have prospered when the mines of gold and silver were productive, and languished and decayed when the mines failed. Modern civilization commenced with the supply of gold and silver from the New World. Its progress has been measured by the yield of the mines. It has been rapid when they have been productive; it has been retarded by every decline in the output of gold and silver. The wonderful revival of commerce and prosperity enjoyed while the gold placers of California and Australia were productive, illustrates the beneficial effects of an abundant supply of money. When the output of gold declined, the discovery of the great Comstock lode revived silver-mining; since which time the combined product of gold and silver has not been more than sufficient to keep pace with the increase of population and business.

If silver had not been demonetized, the use of both metals would have furnished a reasonable supply of money and disarmed the advocates of paper flat money. The demonetization of silver cut off half the supply, violated existing contracts, reduced values, and paralyzed industry. Prosperity cannot be restored without an increased supply of money. Silver must be used as money equally with gold, or the metallic basis must be abandoned. If silver is rejected, some form of fiat money must be invented, or history will repeat itself by a return to barbarism. Civilization cannot exist without money. The demonetization of silver was the crime of the nineteenth century. The use of both gold and silver as money was a part of every contract. The people of the civilized world had agreed to pay, in either gold or silver, not less than a hundred thousand million dollars, when silver was demonetized by strategy or fraud. By such demonetization every contract was made payable in gold alone. The debtor was denied the option of paying in either gold or silver, as stipulated in the contract. . The United States immediately thereafter resumed specie payment, and compelled the people to sell their products at a discount of from 30 to 50 per cent. to buy gold with which to pay obligations contracted to be paid in either gold, silver, or paper. Other nations followed our example. The injustice and wrong of this act did not stop with the robbery of the debtor. Its baneful effects will not cease until silver is remonetized, or until the use of both gold and silver is abandoned.

The amount of gold coin in the commercial world has not materially increased since 1873, when silver was demonetized. Many statisticians contend that the entire output of gold since that time has been employed for non-monetary purposes. However that may be, population, business, and credit have increased out of all proportion to the supply of gold. The general range of prices of commodities has declined about 40 per cent., business is languishing, and prudent men are in constant dread of an impending crisis. Every movement of gold is viewed with alarm. The scanty reserves of gold coin in the money centers of Europe and America are a constant menace to financial credit and business. The monometallists cannot deny that the money of redemption is inadequate to sustain the existing fabric of credit. They suggest no remedy to supply the deficiency, except more contraction and less enterprise; more poverty and less prosperity. The people will apply a remedy. They have not abandoned hope. They have no fetish worship for gold, but they are conservative. They will adhere to the metallic basis so long as the mines furnish a sufficient supply of the precious metals and so long as both metals are used.

Previous to the conspiracy by which the gold trust of the United States and Europe was formed, each nation furnished its people with the kind and quantity of money which was deemed best suited to their wants. Some used gold, others silver, and others both gold and silver. England used gold alone as money; Germany, Austria, Holland, and India and other Asiatic countries adhered to silver; while the Latin Union and the United States used both gold and silver. So long as this freedom of action in furnishing the people with money was enjoyed by the nations of the earth, a parity existed between gold and silver at the ratio of about 15½ of silver to one of gold. No one in any part of the world would sell either gold or silver for a less price than could be obtained in the countries using both metals. So long as a given quantity of silver could be exchanged for the same amount of money as another given quantity of gold, such given

quantities were always equal in value. Money was the standard, and it made no difference of which metal it was composed. The parity of value between the two metals was not affected by the demonetization of silver in England in 1816, nor by the demonetization of gold in Germany and Austria in 1857. It required a combination of all the leading commercial nations to break the metallic tie and to advance the value of gold. The United States took the lead in the gold combination without the consent of the people. That combination or trust has inflicted pecuniary loss upon the country beyond computation, and has substituted poverty and want for abundance and prosperity.

When the Barings, by speculation in South America, incurred gold obligations heavier than they could bear, and thereby failed, the financial credit of the commercial world was shaken to its foundation. The people of the United States were not parties to the South American speculation which caused the failure, but they were partners with their English cousins in maintaining the gold trust, and suffered for the extravagance of their gold associates. What advantage has been gained by this gold combination? Why should it be continued? And above all, why should another combination be formed for the pretended purpose of unifying the currency of the commercial world? Why should the United States use the same kind of money as other countries? What possible good can result from such an arrangement? The pretense that gold coin is required to settle foreign balances is absurd. Such balances are adjusted by a well-established system of exchange. Bankers who deal in exchange furnish all necessary facilities for conducting foreign commerce.

The value of money in any country is determined by its purchasing power in that country. Its power in exchange at home is all the value it possesses. When transported, whether it be gold, silver, or paper, it becomes a commodity. The banker, knowing the purchasing power of the money of every country, readily reduces the money of one country to that of another, and furnishes business men with the money they require in any foreign country. A currency that would circulate throughout the world must be made a legal tender by every nation. No inde-

pendent legislation, by different nations, on the money question could be tolerated. Such an arrangement would be impossible and undesirable. A stringency in one country would affect every other. Those who advocate it seem to suppose that the exchange of the money of one country for that of another is commerce. They do not seem to realize that commerce consists in the interchange of commodities, and that money is used as a measure or counter for that purpose. Money should never be exported. The country which exports its money will bankrupt its people. Internal commerce and business depend upon the volume of money at home. The loss of the circulating medium by export is ruinous. An international agreement providing for a common currency for export would be disastrous.

The country whose money is of such material as cannot be converted into money of any other country is protected from the loss of its circulating medium by export. Why should not each country enjoy such protection? Why should any country buy foreign commodities worth more than those of its own production that it can give in exchange? It is better to let foreign creditors wait or refuse credit than to produce contraction at home by exporting money. Exchange accommodates foreign commerce, but domestic commerce is dependent upon the supply of money at home.

The people of the United States must have more money. More gold cannot be obtained. Why not use silver as well as gold? Silver and gold are limited in production. Silver will not furnish too much money. Fiat paper, the alternative of silver, might do so. The estimated annual product of the silver of the world is about 130,000,000 ounces. Some deduction ought to be made from this estimate on account of the exaggeration of speculators in mines. But whatever the yield may be, it was all absorbed prior to 1890, when the price of silver advanced by reason of discussion and legislation in Congress. The sudden rise in price checked exports from Asia. Three bushels of wheat were exchanged in India for the same amount of silver that two bushels would procure previous to the advance. All other exports were similarly affected. The Asiatics ceased purchasing silver. The increased purchases in the United States

under the act of July 14, 1890, did not equal the amount formerly exported to Asia. For the first time in history there was, in the United States, a small accumulation of silver bullion for which there were no buyers. This surplus bullion has depressed the price of silver from \$1.21 to about 98 cents per ounce. The power of Great Britain over the Asiatic market was exerted to prevent the purchase of silver. In India paper was substituted for coin by English monometallists. It was necessary to depreciate and degrade silver that free-coinage legislation in the United States might be obstructed. If Congress had adopted free coinage instead of requiring the purchase of four and one half million ounces per month, more silver would have been absorbed by Asia, because the motive for depreciating silver to affect our legislation would not have existed. Certainly free coinage could not have more effectually cut off the Asiatic market for silver than did the act of 1890.

The addition to our circulating medium up to the present time which free coinage would have caused could not have exceeded fifteen million dollars. Such an addition would have been a great boon in the present stringency of the money market. The prediction that European coin would be sent here if our mints were opened to free coinage of silver is idle. Europe needs all her silver coin. It is all held in reserve for redemption of her paper or is in circulation among the people. It is the people's money, which cannot be withdrawn without great inconvenience. It is circulating on a par with gold at a ratio of  $15\frac{1}{2}$  to one. This is a valuation higher by more than three per cent. than that placed on the silver in the standard dollar. There is no silver coin in the world which is not valued higher than our own, except the Mexican dollar, which contains a little more silver than there is in the standard dollar of the United States. The only cheap silver in the world is the small accumulation of silver bullion now on the market. That accumulation not only depresses the price of silver, but weighs down the price of all commodities.

Since silver was demonetized the price of wheat and the prices of all other farm products which we export have been governed by the price of silver. The reason for this is that India and all

our competitors for the supply of the European markets adhere to the silver standard. The purchasing power of silver in those countries remains stationary. There is no discount at home on the silver that they receive in return for their wheat and cotton; while the farmers and planters of the United States, who sell in the same market and for the same price, are compelled to suffer a loss of more than 30 per cent. The advantage that England secures by the use of cheap silver to exchange for wheat and cotton in India was urged, before the English royal commission, against the remonetization of silver. The argument was that this advantage releases England from paying tribute to the United States for farm products, while it develops the resources of India. It is a curious fact that the average price of wheat for the last twenty-five years has been equal to the value of 3711 grains of pure silver, the amount contained in the standard dollar. This was the case when silver fell to 89 cents an ounce, and also when it rose last year to \$1.21.

Free coinage would make the silver bullion in the standard dollar worth \$1.29 an ounce, and would enhance the value of farm products in an equal proportion. It would also enlarge the metallic basis and place the fabric of credit, which is now tottering, on a solid foundation. It would stop contraction, furnish more money, revive business, and secure prosperity. The only persons in the world interested in preventing free coinage are the owners of gold and of gold obligations, a class of persons who are willing to sacrifice the happiness of mankind to increase their own accumulations. They are governed by the instinct of the miser, and have the self-righteousness of the Pharisee of old in the temple at Jerusalem. Their power of deception seems inexhaustible, and it has been used with marvelous effect. By their arts thousands of millions of wealth, produced by honest toil, have been transferred from the masses to the designing few. They have interested the people in side issues and excited them over sentimental questions; and, like the cuttle-fish, have darkened the waters in order to conceal their schemes of robbery.

At last the people are investigating the subject. Contraction and hard times have aroused them. They demand more money. They demand that the gold trust or partnership, which was

formed without their consent, shall be dissolved, and that silver shall be restored to its place as money. They repudiate the act of 1873, which deprived them of the use of silver, doubled the burden of their debts, reduced the price of their property, and subjected them to privation and want. They have resolved not to be driven from their homes and made dependent upon the tender mercies of money kings. At all events, they will test the question whether this country shall be governed by a moneyed aristocracy or by a free and industrious people, devoted to liberty and independence. They will know whether laws can be made for the benefit of the producers of wealth as well as for the parasites of civilization. Let the possessors of accumulated capital take warning. Justice and moderation are necessary for the welfare of all, but the radical contractionists will produce radical inflationists. The latter will prevail if the former insist upon that issue. The common ground of safety and fair dealing is to return to the money of the Constitution-gold and silver coin—as the basis of a sound currency.

WM. M. STEWART.

## OUR INTERNATIONAL COPYRIGHT LAW.

It was impossible to write the first word of the above title without a certain sense of satisfaction. At last an international copyright law is ours; and though it is not one to be proud of, it is certainly gratifying to have outlived the shame of having none at all. It is matter for congratulation, too, that after all the "cranks" have had their say (as they must have regarding all reforms), from the denial of all copyright down to the royalty-stamp scheme, the measure passed is at least sane, if not generous, and meets the most urgent needs, if not all.

Nevertheless, when the editor of the Forum asked for an article embodying my impressions of the law, the first impulse was against writing them. The bill, like all legislation, was the result of a series of compromises. It was supported by the joint committee of the authors' and publishers' leagues as the best bill attainable, and although the members of the committee retained their personal rights of criticism, it will be time enough for that when the working of the law demonstrates its faults. Its merits still have arrayed against them so much that is base and unscrupulous, that remedial criticism now, would be in danger of being used destructively.

On the other hand, it at first seemed superfluous to write about the advantages of such a measure, for this has already been done at length in many places, including an article in this review which the present writer was invited to contribute in March, 1888. There appeared, however, to be good reasons for going over the ground again while public attention is directed to it. There is much ignorance regarding the probable effects of the law, even among those most interested (the evening before this is written, one of our leading authors professed really to know nothing of the subject); and it is important that all readers should realize that the law, although defective and narrow, merits the support of all honest men.

Its moral effects will probably be its most important ones, but they are outside of the present writer's province. In writing about it at all, one sets up for more or less of a prophet, and will probably find all he had better attempt, if he plays that rôle only in relation to his own trade. Yet the author's interests are so inextricably blended with the publisher's, that it is not worth while to try to discuss them separately.

First, as to some obvious effects of the new law which are essential to the understanding of others not so apparent. The most obvious effect will be, of course, that foreign authors will be paid for such of their books as are copyrighted here. All payments will have to be added to the price of books, and this will relieve the American author from the competition of prices on foreign books that are low because they are not honest.

A less obvious effect is that, when the habit of paying is revived, foreign authors will be paid for many books that are not copyrighted, just as they were frequently paid for non-copyrighted books in the period from about 1860 to about 1876. Then the American publishing business was mainly in the hands of men who not only paid foreign authors, but who respected each other's compacts with such authors, and so made it possible, there being no rival editions to compete with, to pay liberally. Moreover, there was then in the trade honor enough, even among the thieves, to keep publishers from stealing from each other, and so any repentant thief who wanted to, could afford to pay honest royalty. The new law will inevitably drive out the worst element in the trade and put it on the old basis again, even in relation to books which may not be copyrighted.

There will be many of these, especially of the less popular class of books that presumably will not pay for the type-setting here which the law demands as a condition of copyright. Possibly even Bryce's "American Commonwealth" might not have been copyrighted under such a law. Then, as in that case, unexpected popularity in a non-copyrighted book will, of course, offer a temptation to the pirate. But with the possible prizes so few, relatively, the piratical industry will die out, and things will return to the condition of the period already referred to, when copyright was not in all cases essential to safety.

An indirect result of this will be much relief to the American author from mock-auction methods in publishing. Foreign authors will be able to determine who shall represent them here, and naturally will select reliable representatives. That as well as the other causes indicated, will drive out of publishing a class of people who have preyed upon the business weaknesses of American authors as well as upon the defenselessness of foreign ones.

Yet the most effective cause of forcing down the American author's royalties has not been the mere non-payment of those of the foreign author, but the wild competition of the cheap editions issued by reckless and inexperienced publishers. The chance to take books without paying for them, and especially to get out competing editions of books already proved successful by some established house, has led into the business a large number of the class of adventurers naturally attracted by such opportunities. The glut of all mechanical products caused by the protective tariff has made it easy for these people to get credit from paper-makers, printers, and binders (in fact, several publishers have been "set up" by over-protected establishments), and they have conducted their business with the recklessness to be expected—piling into the market edition after edition of each successful foreign book, each cheaper than its predecessor, until the publishers have destroyed themselves and each other. Probably there is not more than one of them who has not failed, and most of them have failed several times.

Not only has the market been overcrowded with superfluous and unreasonably cheap editions of good books, but with bad books. The publishers of the innumerable "series" have had to "rob the cradle and the grave," and many other places less eligible than either, for authors to keep their series going. To go at all, they must go regularly like a magazine, whether books worth publishing appear regularly or not; something must appear at the stated time, both to secure cheap postage and to keep up the habits of the clients—clients generally for the most ephemeral stuff, developed at the expense of all reading not ephemeral.

Because of this, the bookstores, except in favored spots, have suffered in number and quality. The book-buying habit

has fallen off; the pamphlet-buying habit has taken its place. The pamphlet soon finds its way to the waste basket, which, in many cases, it should never have risen above, and the permanent possessions of the household are less than they ought to be by one book. The average American citizen's source of intellectual pabulum is now the "news stand." It and the toy shop with piles of pamphlet "libraries" at one end have too generally succeeded the bookstore. The old habit of dropping into the bookstore and buying the latest good thing—latest in form or matter—is now indulged in by few people, and in relatively few places.

The reading public having been gorged to a degree fatal to them with the deleterious products described, what chance has there been to crowd in a reasonable share of the productions of American authors? Before the flood of cheap pamphlets destroyed the book-buying habit, publishers of standing were generally able to sell enough of any book on which they would put their imprint, to protect them from serious loss. Now they find it impossible to market more than about a third as many copies of a new copyright book as they could before, or to obtain more than about three quarters as much per copy for any given mechanical grade. Besides, in most instances the grade has been forced lower than the width of the book's special market would justify, while the narrow and uncertain market has discouraged almost fatally discouraged—the undertaking of books by unknown aspirants, or of books by authors who appeal only to a select class. The new law is going to restore all these advantages. It will restrict books to editions for which there is a sound economic demand, thus relieving all authorship from illegitimate competition, and opening up the avenues to publicity now closed; and it will foster a return to standard literature in place of the ephemeral stuff of which the "libraries" have been principally made. This will encourage publishers to issue such literature in editions justified by a wider market, and will probably make the great classics of all literatures more accessible in better forms and cheaper than now. Such is the case in all countries where international copyright has relieved standard literature from the competition of such trash as can be stolen from other nations—frequently

matter of so little attractiveness that it would never have been published if royalty had to be paid on it.\*

But aside from the question of cheapness, the new law is going to make hosts of people pay a dollar or two for a book which will be good for generations, as cheerfully as they now pay the same price for an evening at the theatre, which leaves no tangible possession behind. The theatre-price has long been made practicable by virtual international copyright for dramatic productions. There never was more absurd demagoguery than the statement that the people who pay so freely for plays, must steal books or go without them. The cry for "cheap [stolen] literature for the people" is not only dishonest, but nonsensical. There are few people who cannot buy more books than they can read, and who did not buy them before they stopped buying books at all. But in the present state of affairs, rich people who have unlimited money for other things hesitate to pay an honest price for an honest book, because they have been corrupted into a habit of paying dishonest prices for dishonest books.

I have never been one of those who have advocated international copyright with the assurance that it will not increase prices at all. It will increase the prices of first editions of books by living authors, but not more than people can well afford to pay. But even of books by such authors, those that are found capable of reaching many readers will be issued later in forms which the many readers will pay for. A frequent question with a publisher is whether to seek a narrow public at a high price, or a wide public at a low price, and it is generally settled with reference to the particular book; some books—and some of the best will not be widely read at any price. Nevertheless there are so many books on which it makes so little difference which way the question is decided, and the difference between a high price and a low one for a given book is generally so small, relative to the incomes of the reading class, that the tendency in countries where customs and markets are well established, is to average at

<sup>\*</sup> This subject was admirably treated at length in Mr. Brander Matthews's pamphlet on "Cheap Books and Good Books," which is reprinted with much other valuable matter in Mr. Putnam's compilation on "The Question of Copyright,"

a price practicable for nearly everybody, and yet a form good enough for anybody. Such is specially the case in France and Germany, and it would be in England if the small territory and exceptional distribution of wealth did not make it practicable for a great central circulating library to choke off local libraries, to buy the whole of an expensive first edition, and to hire it out at high rates. Our prices and methods may be expected to come nearer to those of France and Germany, as in fact they were before the recent saturnalia of piracy (if the reader will tolerate so mixed a metaphor). Our prices on first editions were much lower than those of England, and the books were much less On the other hand, owing partly to our greater luxurious. wealth as compared with France and Germany, and partly to our not having as many bookbinders to the square mile of our territory, our first editions were generally issued in cloth cases, while theirs are in paper covers. And, by the way, the printing of our average editions was on the whole better than the French, though that of their fine editions is unsurpassed; the reasons for all of which it is not worth while to go into now.

It is to be expected, then, that under the new law our first editions will generally cost more than now, but will be enough better made to be worth the difference, and that our own authors will sell more of them, and at a larger royalty. But it is also to be expected that in the case of books that "the people want," these first editions will be succeeded by cheaper ones—just as cheap as the people will provide a wide market for. These will be in addition to the books already spoken of, whose first editions were issued long ago, but for which a wide demand is still possible; for them, publishers will be encouraged to cultivate this demand by cheap durable editions, when they have no longer to contend against the opposition of the poor material on which our people have been principally "educated" (outside of school) for half a generation. Averaging all sorts of books, the gain will be very great, for it is not so important to have the new book cheap, even if that did not involve underpaying the author, as it is to have cheap the book that has stood the test of time, or at least that of contemporary opinion.

And now, leaving the purely economic region, let us consider

some intellectual probabilities. Does the reader happen to realize that there is not an American cyclopedia, or hardly any other American work of reference, well revised up to date, or even up to the census of eleven years ago? New figures have been inserted in some old plates, but very few of the new generalizations which specialists should draw from the figures; and the fresh biographical and geographical and scientific matter is generally only what could be squeezed into plates by cutting out something else. When the wholesale piracy began, about the centennial of our national permissive attitude toward it, we were fairly provided with such books—full and up to date, and new ones were appearing with encouraging frequency. Since then, we have got along with those we had, with only the most unavoidable corrections. Nothing, or next to nothing, thorough and illuminating has been done.

Yet one of the foregoing expressions needs correction. We have not "got along on those we had," but on foreign ones which have been reprinted right and left and sold at the prices of stolen goods. These books answer the average man's purpose, or he does not realize that they do not, and he thinks that in them he is getting great bargains. But he remains ill-informed or misinformed when he consults them regarding his own country, and in him American editors and publishers lose the custom necessary to enable them to bring their own works broadly and thoroughly up to date, not to speak of undertaking new ones. This tremendous evil we may look upon the new law to remedy in time, perhaps very soon if those interested can feel assured of its stability.

But works of instruction, important as they are, are not as important as works of inspiration. "Give me the man who makes the songs of a nation, and I care not who makes its laws." For "songs," read all the literature of feeling and living—not only poetry, but fiction and biography, and even the dry pages of philosophy and science; for they are treating in these days questions that concern our deepest nature. In all these things, especially in fiction, we have been drawing more and more from foreign sources. Mark Twain has said (I quote him from Mr. Matthews's article already referred to):

"Statistics of any public library will show that of every hundred books read by our people, about seventy are novels—and nine tenths of them foreign ones. They fill the imagination with an unhealthy fascination for foreign life, with its dukes and earls and kings, its fuss and feathers, its graceful immoralities, its sugar-coated injustice and oppressions; and this fascination breeds more or less dissatisfaction with our country and form of government, and contempt for our republican commonplaces and simplicities; it also breathes longings for something 'better'; which presently crop out in diseased shams and imitations of that ideal foreign life. Hence the dude."

And because the novels producing those precious results were stolen, they could be sold cheaper than the productions of our own writers, who had to be paid. So disastrous has been the result on our own literature that, as I phrased it once before, it was rapidly becoming a question whether we were to continue to have an American literature . . . whether, outside of the daily and periodical press, we were to derive our ways of thinking—our ideals of life and politics—from alien and unsympathetic sources. But this was not the whole question. With the market so gorged with trivial matter, it was rapidly becoming a question whether, with a few rare exceptions, we were going to have any serious books at all.

But now that the foreigner must be paid, we can get our native works as cheap as we can get his, and there is more chance of our encouraging a new race of Irvings and Hawthornes and Longfellows and Emersons to bring us back from Anglomania, and many other manias, to a sober working out of our own free ways, and to a new delight in our own free life.

HENRY HOLT.

## A RATIONAL SYSTEM OF PHYSICAL TRAINING.

THERE are three axioms to which physical education must conform: first, the best exercise is that which reaches the largest number and does most for the weakest men; second, the best exercise is that which makes the hardest work attractive; third, the best exercise is that which most successfully co-ordinates body, mind, and will. Developing giants, lowering records, winning races, and knocking out opponents are doubtless interesting things to do; but they are no part of that physical education which the college aims to give to its students.

Students who participate in those contests in which the maximum of muscular development and physical endurance is essential to success are martyrs to the cause of physical education. They acquire greater physical development than a student needs to carry on his college studies to the best advantage, and they form habits which oblige them to keep up, after graduation, more exercise than is consistent with engrossing professional pursuits. The influence and example of such severe training as a university crew undergoes are valuable in keeping up the athletic tone of an institution and in setting the pace for the average student to follow. But the greater physical benefit comes, not to the eight who row the great race, but to the thirty or forty who train with them, and who row only in class races or do not race at all. The college professor looks on the highly-trained athlete as Emerson looked on the monk:

"I like a church; I like a cowl;
I love a prophet of the soul.
And on my heart monastic aisles
Fall like sweet strains or pensive smiles:
Yet not for all his faith can see
Would I that cowlèd churchman be."

Intercollegiate athletics cannot be made the basis of physical education, because they reach only a small fraction of the col-

lege; they do too much for the strongest and almost nothing for the weakest, whereas our first axiom demands that physical education shall reach all and shall do most for the weakest men.

The second axiom declares that the best exercise is that which makes the hardest work attractive. The elaborately-devised drill, adapted to bring each muscle into play by a specially-provided movement, set to music and stimulated by the hope of a prize at the end, is a favorite form of physical education in colleges to-day. Now this does very well for schools and voluntary classes in Christian Associations, but it is too childish, too mechanical, too monotonous and dead, permanently to interest and attract the college student. College students do not enjoy pulling first one muscle and then another, like so many puppet players performing upon themselves. They hate it, and make light of it, and shirk it in every way they can. Such systems fall short of the requirements of our second axiom.

Our third axiom is that the best exercise is that which most successfully co-ordinates body, mind, and will. The Sargent system aims to do this. By showing on a chart where a man stands in comparison with other men, by giving him a handbook in which the remedy for his deficiencies is pointed out, and by thus awakening an interest in his own symmetrical development, this system, to a certain extent, unites mind, will, and body in physical development. Yet this union is in great measure artificial, unnatural, and unreal. The system emanates from the office rather than from the floor of the gymnasium. As a basis of statistical tabulation it is ideal. But college boys are very different beings from statisticians; and they cannot all be made to take that interest in the fine points of anthropometry which, according to the theory of this system, they ought to take.

Each of these systems has its merits, and a wise institution will borrow features from them all. In Bowdoin College every student is measured, and receives a chart in which his line is drawn and a hand-book in which exercises for making up his defects are prescribed according to the Sargent system. Each class prepares a drill for the annual athletic exhibition, and we maintain a ball nine, a football team, and a boat crew. Our main reliance, however, for physical education is upon athletic

exercises under the immediate instruction, direction, and control of the director of the gymnasium. The Freshmen receive sufficient military drill to give them erect form and graceful bearing, and to enable the class to be directed in their subsequent work by military orders. Club-swinging is taught during the remainder of the year, as this is found to be an exercise in which a class can be most effectively brought to act in unity, and in which students take enough interest to keep it up afterwards. By the end of the Freshman year the members of the class are able to stand erect, to obey orders, to keep time, and to endure without fatigue or injury a half-hour of vigorous exercise. During the first half of the Sophomore year the class is taught the elements of wrestling. The members practice the catches, holds, and breaks at the word of command, and thus acquire, in addition to the exercise, so much of the science of wrestling as would be given in a first course of private lessons. During the last half of the year the same is done in boxing. The students practice the blows and guards, and learn the elements of self-defence. At the end of the period of exercise a space of a minute or two is allowed for boxing or wrestling matches between the pairs who have been practicing together. In the Junior year fencing with single sticks, and in the Senior year fencing with foils and masks, are taught in the same manner.

Let us test this system by our three axioms. First, it reaches every student and does most for those who are least developed. These exercises are required of all. Every student is required to come to the gymnasium, to change his clothes, and to exercise in this way half an hour a day during four days in each week from November to March. The weakest men are required to do as much of this work as the strongest, and thus greater exertion is asked from the weaker; though for supplementary work on the apparatus the classes are divided into three squads on the basis of their strength as ascertained by physical examination. In wrestling, boxing, and fencing there is no opportunity to shirk; for each man has an opponent to keep him at his work, in addition to the general oversight of the director.

This kind of exercise also fulfills the requirement of our second axiom. It is hard work; the students like it and enter

into it with all their might. It takes advantage of young men's natural fondness for athletic contests, and enlists their athletic spirit. At the same time it does this under such control and in such moderation that the evils of excessive competition are excluded. Before this system was introduced, the enforcement of physical exercise ranked with the enforcement of attendance at church and chapel as one of the three thorns in our official flesh. Since then we have had no more difficulty in getting students to take exercise than in getting them to eat their meals. sure, the requirement is supported by adequate recognition in our educational curriculum. The work in the gymnasium counts as one full study for the winter term; and one thirteenth of a student's rank for the college course is based upon the regularity and fidelity with which he does the work in this department. Still we rely chiefly, for getting the work done, upon the interest and enthusiasm that it awakens in the young men themselves. The spirit in which the work in the gymnasium is done resembles rather the freedom with which they pursue an elective that they like, than the slavishness with which they set about a prescribed study that they hate.

This system also meets our third requirement; it co-ordinates body, mind, and will in exercise. Wrestling, boxing, and fencing exercise every muscle of the body, expand the lungs; quicken circulation, and stimulate perspiration; yet they do this in such a way that the student is in happy and healthy unconsciousness of it at the time. The development of his body is not presented to his mind as an external and abstract end to be attained; nor is it at every moment dependent upon an act of volition directed to that specific object. Body, mind, and will are united in doing a definite thing. The muscles themselves are thereby effectively developed; and quickness of eye, steadiness of nerve, resoluteness of will, together with such mental and moral qualities as coolness, courage, promptness, and decision, are thrown in. Physical strength, thus subjected to quick perception and prompt execution, is worth infinitely more than the same amount of mere muscle piled up on the back of a listless mind and a flabby will. The end of physical education is not the manufacture of mere muscle. It is the development of a body, strong

to support, prompt to obey, and efficient to execute, the thought and purpose of the man.

The following table shows the relation between physical development and scholarship in the 153 graduates of Bowdoin College in the classes from 1886 to 1890. The director of the gymnasium has divided them into three equal divisions of 51 each, on the basis of proficiency in athletics. The first division includes the members of the college baseball and football teams, members of the college crews, and winners of first prizes in field-day contests during these years. The second division includes members of second nines and elevens, members of class crews, and contestants who failed to win a first prize. The third includes those who took no part in athletic sports. I have divided the same 153 men into three equal divisions of 51 each, on the basis of their scholarship as recorded in the rank books of the college. The first division includes the strong, clear, thorough scholars. The second includes the average scholars. The third includes those who were either dull or lazy, and those who carried away nothing of value from their college course except such contagious germs of wisdom as they could not help bearing with them. By arranging the athletic divisions in horizontal lines and the scholarship divisions in vertical lines, I have shown how each division in athletics is distributed among the three divisions in scholarship, and how each division in scholarship is distributed among the three divisions in athletics.

SCHOLARSHIP.					
		I.	II.	III.	TOTAL.
ATHLETICS.	I.	21	15	15	51
	II.	18	20	13	51
	III.	12	16	23	51
	Total.	51	51	51	153

This table shows that rank in scholarship tends to coincide with rank in physical development. The most frequent coinci-

dence is that of third-class scholarship with third-class athletic ability, which occurs 23 times. Next in frequency is the union of first-class scholarship with first-class athletic ability, which occurs 21 times. The rarest combination of all is that of first-class scholarship with third-class athletic ability.

To infer from this table that athletic ability is related to scholarship as cause to effect would be unwarranted. These 21 first-class scholars who are also first-class athletes would have stood just as high in scholarship if there had been no intercollegiate contests in which to display their athletic prowess. But the table does show conclusively that excellent physical development, which is an indispensable condition of success in athletics, is also a favorable condition of success in scholarship. It explodes the popular fallacy that the development of the scholar's mind and that of his body are in inverse proportion, and shows that they stand in closest correlation.

The awards of the Smyth mathematical prize in Bowdoin College for the past six classes present a remarkable, if not a representative, phenomenon. This prize of \$300 is based on a course in mathematics extending over two years, and is the most important college prize. Of six consecutive recipients of this prize, the first was the winner of the quarter-mile run; the second was the pitcher of the college baseball nine; the third was the most brilliant performer on the trapeze; the fourth was a man of good physical development without special athletic attainments; the fifth was the catcher of the college baseball nine and the best general athlete in college; the sixth is a candidate for a position on the college boat crew, and will next year be a member of the football eleven.

We know that every intellectual act is accompanied and conditioned by molecular changes in the cells and fibers of the nervous system, and is ultimately dependent upon the quantity and quality of blood that supports this activity of nerve and brain. We know, too, that the combined influence of a trying climate and of the strain involved in adjustment to new, complex, and rapidly-changing industrial, economic, and social conditions is overdrawing the vitality and nervous energy of our people at a rapid and ruinous rate. This strain falls most heavily upon the

professional and mercantile classes into which our students are very largely drawn. It is the duty of the college to send out its graduates physically equipped to stand this strain themselves, and to hand down to their offspring constitutions as good and strong as their own. This duty is now recognized in theory. Every college is compelled to build a gymnasium, and to throw it open during a portion of the day. This is, in itself, a step forward. No college in New England would dare to offer its students to-day such miserable facilities and such inefficient instruction as Harvard offered its students only 12 years ago.

Yet, after all, many of our colleges are only playing with the problem. There is no definite requirement, no specific program, no academic recognition of physical education. Physical education is of sufficient importance to receive the same intelligent and business-like consideration that is given to the other departments in a college. The building must be constructed with a view to the precise use that is to be made of it. The director must be a man of collegiate and medical training, proficient himself in physical exercises and able to impart enthusiasm for them to others, and endowed with something of the military capacity to command and manage men. A man who combines these qualities and attainments should have the same academic standing and remuneration as the heads of other departments. Then the work required of the students should be as systematic and dignified, in proportion to its amount, as that in other departments.

Leave physical education entirely to the whims and caprices of the students, and extravagance and excess must be expected. Leave it entirely to the toleration of an indifferent faculty, and what wonder that the exercises become either a bore or a farce! Enlist the enthusiasm of the student under the guidance of an interested faculty, combine the ardor of youth with the wisdom of maturity, and, at an annual expense of not more than \$12.50 for each student in a college of average size, it is perfectly possible to maintain a course in physical education which will give to every student who is not hopelessly handicapped by heredity or dissipation, a sound and healthy body to be the support of a vigorous intellect and the instrument of a resolute will.

WILLIAM DEWITT HYDE.

## THE NEW NORTH-WEST.

EXACTLY three hundred years after Columbus discovered the new world, Captain Gray entered the mouth of the Columbia River and laid the foundation of our claim to the territory out of which the States of Oregon, Washington, and Idaho have been formed. His discovery was followed in 1804-5 by the expedition of Lewis and Clark and by the establishment of several trading posts; and as early as 1830 emigrants from the western States were making their way over the mountains into Oregon. When the Boston shipmaster sailed into the mouth of the great river of the West, less was known of the western half of this continent than was known of "Darkest Africa" before Stanley first penetrated it. It was one unbroken waste, one vast wilderness, apparently forever doomed to the solitude of nature. In less than a century a marvelous transformation has been wrought. Civilization reigns instead of barbarism; peace, law, and order prevail in place of violence, strife, and perpetual warfare; a productive country filled with thrifty, intelligent, civilized communities has taken the place of a barren region occupied only by a few savage tribes.

The progress of the best civilization has always been westward. The story of its march across the Alleghany Mountains and the vast slopes and rolling prairies of the West to the western shores of the continent forms one of the most interesting chapters in our history. What were the motives which induced the early pioneers to leave comfortable homes, to turn their backs upon civilization, and to march two thousand miles through a wilderness to find an abode on the Pacific coast? The discovery of gold is not sufficient to account for the movement, although it contributed to swell it and to hasten the settlement of California. The immigration to Oregon began long before Sutter's discovery. The prospect of cheap land does not account for it; land was cheap everywhere. The principal inducements

were undoubtedly the mild and equable climate and rich soil, which will continue to attract population until the Pacific coast shall be as densely populated as the Atlantic seaboard. An incident recorded in Barrows's "History of Oregon" illustrates another motive, which actuated some of the earlier immigrants to the North-west. Speaking of the missionary party which crossed the continent in 1836, the author records a scene which, he states, is surpassed by few in historic grandeur. When the party had reached the Pacific slope they stopped and dismounted.

"Then spreading their blankets and lifting the American flag, they all kneeled around the Book and with prayer and praise took possession of the western side of the continent for Christ and the church."

Again, many settlers were actuated by a desire to wrest this valuable region from British dominion. The patriotism and courage of a people and their capacity for self-government were never better illustrated than by the pioneers who settled the Oregon territory, maintained their allegiance to the general government during the period of joint occupation, and held the territory for the United States. Isolated from civilization and ignored by the authorities at Washington, they established a government of their own, so that when Congress organized a Territory it adopted, in large part, the laws already in force.

There is a limit to the westward march of colonization—a point beyond which no inviting fields are found. The Pacific Ocean is a barrier which the movement cannot pass. From the earliest settlement of Oregon the tide of immigration, upon reaching this limit, has in part turned back. Oregon furnished settlers for Idaho and Montana, and many of those who first settled west of the Cascade Mountains became, in later years, pioneer settlers in eastern Oregon and Washington. Like a stream which meets an unsurmountable obstacle, immigration will gather in volume here upon the confines of the continent.

It may be supposed by some that the impetus of railroadconstruction and the westward movement of immigration to the Pacific coast has caused the advantages of the intervening territory to be underestimated; that there is room here for a great expansion of population and a large desirable field for enterprise; and that the north Pacific coast has something to fear

from its development. But it is a matter of common knowledge that this intermediate region can support but a relatively small population; that stock-raising there requires large areas of land in comparison with more favored regions; that the supply of water for irrigation is limited; and that but a small part of its area can be made productive. South of us are considerable regions adapted to some kinds of agriculture and to mining, but these offer no great inducements in this direction to American enterprise. North of us in the vast, unsettled areas of the Dominion of Canada, there is more to attract the intending settler; but notwithstanding her large area of unoccupied territory, extensive forests, and rich mines, Canada is unable to keep her thousands of immigrants, partly on account of her climate, and partly on account of the condition of her industries and the character of her institutions, and there is a constant movement across the boundary line into the United States. For the near future, at all events, the most inviting field for adventure, investment, and settlement is thus on the north Pacific coast. view of this it is pertinent to inquire about the capacity of this region to meet the great demands that will be made upon it and about the inducements that it offers to immigrants.

Nature everywhere in this region has been lavish with her The scenery of the Columbia River through the gorge of the Cascades is unsurpassed in grandeur by anything found in this country or in Europe, while the changing panorama of mountain scenery, of green islands, of land-locked harbors, and of thriving cities amply repays the tourist who makes the trip from Tacoma or Seattle to the British side of the Sound. The traveler going northward from California to Portland, when he enters the Willamette valley sees the snow-capped mountains of the Cascade range. From my residence in Portland, symmetrical and sublime Mount Hood, 11,218 feet high, and the beautiful sugar-loaf cone of St. Helens, 9,750 feet high, stand out in bold relief, while the rugged peak of Mount Adams, 9,570 feet high, and the summit of Mount Ranier, 14,440 feet above the sea level, are visible in the distance. Ranier is in full view from the cars for a considerable part of the distance from Portland to Tacoma, and at Tacoma and elsewhere on the Sound,

this grand mountain, with its three glittering peaks, seems to stand like a sentinel.

The climate of both Oregon and Washington is mild and equable. In western Oregon and Washington it is difficult to draw the lines that divide the seasons. Winter is usually a wet season, but there are often long periods of perfect weather in February and March. Flowers frequently bloom in the open air in January, and green fields of growing grass and grain may be seen all winter. Once or twice during the winter a few inches of snow falls, but it disappears rapidly. At intervals of several years occurs a winter with ten days or two weeks of freezing weather and a considerable fall of snow. The summers are cool, and excessive heat is unknown. In eastern Oregon and Washington the climate is different. The dry season of summer is more protracted, the rainfall is less, and the heat is greater, though it is never excessive. The winters are colder, but of short duration, the snowfall is light and seldom lies long in the valleys, and live stock ranges on the plains all winter, thriving on the natural grasses without other food, except when the snow is unusually deep or the cold period unusually protracted. The great ocean current, 400 miles wide, formed off the coast of Asia, warms the waters of the Pacific and gives rise to the warm westerly wind known as the "Chinook," modifying the climate of the entire Pacific slope, so that the isothermal line which crosses northern Virginia is deflected northward on reaching the western slope of the continent and meets the Pacific Ocean 200 miles north of the northern boundary of Washington. Though all the cereals grow to perfection in this region, the staple product is wheat. The wheat of the Willamette valley has long been celebrated, the berry being large and plump and the weight considerably exceeding 60 pounds to the bushel. Until the last few years that valley was the principal wheatgrowing section of the new North-west, but of late years wheat has become the leading production of eastern Oregon and Washington. The volcanic soil of this region, much of which was supposed a few years ago to be worthless, is peculiarly adapted to the growth of the cereals. The average yield per acre in Washington is officially stated to be 23.5 bushels, exceeding

that of any other State in the Union. In 1890 the wheat product of Oregon was 12,865,000 bushels, and that of Washington was 8,071,000, bushels. The line of railroad down the Columbia and the Northern Pacific line across the Cascades to Puget Sound were unable to handle it for want of sufficient facilities.

Wool-growing is another great industry of this region. The climate is well adapted to sheep-raising. Owing to the mild winters the fiber of the wool is uniform, and by the proper selection of breeds and the care of flocks, the finest grades, equal to the best Australian wool, can be produced. The flocks increase rapidly, the cost of keeping is small, and the yield is large. The estimated wool product of Oregon, Washington, and Idaho, for the year 1890 was 25,034,527 pounds, valued at \$8,072,350.

Apples, peaches, prunes, plums, and all the small fruits—in fact, almost all the fruits grown anywhere in the temperate zones—reach perfection in Oregon and Washington, and the yield is abundant. The apples of the Willamette valley have been celebrated from an early day. Grapes do well, the soil and climate of southern Oregon being especially well adapted to them. All fruit trees mature early and bear young. Fruit-raising is destined to be one of the great industries of both Oregon and Washington. A sufficient demand for the product of their orchards is the only thing necessary to almost unlimited production. Cheaper transportation and better facilities for shipping to eastern markets will create that demand.

Among the important industries of the future in the Northwest will be the manufacture of beet sugar. Experiments in the culture of sugar beets have demonstrated that they can be produced there as successfully as in any country on the globe. Extraordinary results have been attained in some localities in Oregon, and with the encouragement now given by the government factories will, no doubt, soon be established.

Manufacturing is well advanced. Water power and fuel are abundant, and the supply of timber, coal, iron, and other material for manufacturing purposes is inexhaustible. Manufacturing is favored both by the tariff, which protects against the cheap-labor products of other countries, and by the great cost of

transportation from the distant manufacturing States of the Union. During the year 1890 the value of products manufactured at Portland was \$27,385,000; the amount of capital invested in manufacturing was \$15,841.50, and the number of hands employed was 10,217.

The forests of western Oregon and Washington are the most valuable and extensive in the Union-a mine of wealth awaiting only the touch of human industry to be transmuted into gold. The trees are principally evergreens, the most valuable being the Douglas fir, the white cedar, the hemlock, the spruce, the white pine, and the balsam. The Douglas fir constitutes the main part of the forests; trees of this variety 200 feet high and ten feet in diameter are not uncommon. A year or two ago a lumberman shipped from Puget Sound to San Francisco a fir stick 154 feet long and 24 inches thick. It is estimated that there are 20,000,000 acres of forest land and 400,000,000,000 feet of merchantable timber in western Washington. The amount of timber land in western Oregon is not so great, but immense forests cover the uplands and the mountain slopes. The present capacity of the Puget Sound mills alone exceeds 900,000,000 feet per annum. Some of these mills manufacture logs 120 feet long and six feet in diameter, and many of the Douglas firs are too large for their present capacity.

Ship-building has been carried on to a considerable extent upon Puget Sound, the Columbia River, and Coos Bay, and will be one of the great industries of the future. The cheapest, safest, swiftest, and best carriers of grain from the Pacific coast have been American wooden sailing ships. The finest timber in the world for building such ships grows in Oregon and Washington. The Douglas fir, on account of its great strength and durability, is very valuable for this purpose, and has been for many years past shipped to the Atlantic ports and elsewhere for spars. In 1890 three sailing vessels and 22 steamers were built in Oregon, and 12 sailing vessels and 22 steamers in Washington. Twenty-eight steamers are now constructing within the Portland district, on the Columbia and Willamette Rivers, most of them at Portland.

The fisheries are important and valuable. Deep-sea fishing

has been successfully carried on, and this industry only requires a sufficient market for the product to rival that of any part of the world. Salmon, halibut, sturgeon, smelt, salmon trout, mountain trout, and other food fishes abound, and the rivers have been successfully stocked with shad. The principal salmon-canning establishments are on the Columbia River, but this industry is also to be found on several other rivers on the Oregon coast and on Shoal Water Bay, Gray's Harbor, and Puget Sound. The value of the exported product of the salmon-canneries on the lower Columbia River was in 1889, \$2,636,368.

The deposits of the precious metals in Oregon, Washington, and Idaho are a continuation of the rich deposits in California and Nevada. They are found mainly in southern and eastern Oregon, in the north-eastern part of Washington, and in northern Idaho. Large quantities of placer gold, when gold was first discovered in those localities, were mined in southern and eastern Oregon and Washington, and in Idaho; but until very recently, owing principally to the lack of transportation facilities, quartz mining has not been greatly developed. Valuable ledges of gold-bearing and silver-bearing quartz have long been known to exist, and numerous recent discoveries have been made. Several of these are now being developed, and to secure the transportation of their products railroads are being constructed. The report of the director of the mint shows that the yield of precious metals is annually increasing; in 1890 it was as follows:

	Idaho.	Oregon.	Washington.	Total.
Gold, Silver,	\$1,696,741	\$1,087,125	\$204,000	\$2,987,866
	4,803,717	129,199	90,025	5,022,941

The resources of this region in copper, iron, coal, marble, and building stone are abundant. There are eleven coal mines working in Washington, and the output in 1888 was 1,183,801 tons. Iron ore exists in abundance in both Oregon and Washington, and consists of bog ore or limonite, hematite, and magnetic ore. The smelting works at Irondale, Washington, and at Oswego, on the Willamette, six miles above Portland, produce excellent pig

iron, and when there shall be a sufficient demand for the product, hundreds of such establishments will spring up in both Oregon and Washington, and rolling mills and other manufactories of iron and steel will be established and successfully operated.

The area of Oregon, Washington, and Idaho is about 250,000 square miles—more than double that of Great Britain and Ireland and more than thirty times that of Massachusetts. My estimate is that more than two thirds of the entire area of this region is susceptible of cultivation. Assuming Oregon and Washington to be capable of sustaining a population only one third as dense as that of Belgium, Oregon could support more than 16,600,000 people and Washington more than 11,300,000.

Properly to estimate the productiveness of this region it must be considered with reference to the population, and to the fact that many of its industries have just been established. In Belgium, with more than 6,000,000 people, there were in 1880 271,974 horses, 1,382,815 horned cattle, 365,400 sheep, and 646,375 hogs. In Oregon, with a population of 313,767—less than one nineteenth that of Belgium—there were in 1890, as shown by official reports, 181,236 horses, 826,522 horned cattle, 2,929,830 sheep, and 229,630 hogs. Ohio, with a population of 3,672,316, has 779,323 horses, 1,700,942 horned cattle, 4,061,897 sheep, and 2,741,565 hogs. Ohio produced in 1890 29,984,000 bushels of wheat weighing 56 pounds to the bushel, or less than 8.2 bushels per capita, while Oregon produced 12,865,000 bushels, weighing 60 pounds to the bushel, or more than 41 bushels per capita.

The following comparative statement, taken from the census returns, shows a surprising recent increase of population:

States.	1870.	Population. 1880.	1890.
Oregon,	90,923	174,768	313,767
Washington,		75,116	345,390
Idaho,		32,610	84,385
Cities.			
Portland,	8,293	17,517	46,384
Seattle,		3,533	42,837
Tacoma,		1,098	36,006
Spokane Falls,		350	19,922

Portland, East Portland, and Albina, separated only by the

Willamette River and constituting in fact one city, though with separate municipal governments, contained, when the last enumeration was made, a population of 62,045. The people of these cities are about to vote upon a proposition to consolidate them.

The great increase of banks and banking capital in this region within the last few years is an index to its development. In 1885 Oregon, Washington, and Idaho contained 40 banks with a capital of \$2,970,000. The same States now contain more than 200 banks with a capital of more than \$17,000,000. Between 1885 and 1891 the deposits in national banks alone, in the three States, increased from \$4,366,958 to \$23,540,172. There are fourteen banking institutions, domestic and foreign, doing business in Portland, with an aggregate capital of \$9,000,000 and an undivided surplus of \$3,634,345, and three more organized banks, with an aggregate capital of \$700,000, have not commenced business. The volume of the jobbing trade of Portland was, in 1888, \$75,000,000; in 1889, \$115,000,000; and in 1890, \$131,550.

No better proof is required of the value of the resources of this region and of its desirability for residence and investment than the haste with which competing lines of railroads have been constructed across the continent to reach it, and the great activity of rival companies displayed there in railroad construction to reach the wheat-growing regions and the valuable timber and mineral sections. The railway has been the great factor in the development of this region, as it has been in the whole march of civilization westward within the last quarter of a century. The aggregate railroad mileage in Oregon is 1,350½ miles, exclusive of switches and side tracks. Construction is proceeding on incompleted roads, and several new lines are projected. In Washington there were, in 1889, 1,542 miles of railroad. The work of construction upon several other lines and branches has since been pushed, and the total mileage has been greatly increased. Oregon and Washington now have connection with the railroad system terminating at San Francisco, so that the transcontinental lines centering at that point compete with the Union Pacific and the Northern Pacific for the traffic of the north Pacific coast. The Canadian Pacific also is a formidable competitor for this trade.

The construction of the Nicaragua Canal, the completion of which, within the next decade, appears to be assured, will have a marked effect upon the commerce of the coast and the development of its resources. It will shorten the distance between Puget Sound and New Orleans 11,005 miles, and between Liverpool and the mouth of the Columbia River 6,926 miles. To obtain an adequate idea of the advantages of the commercial and geographical position of this region, one should study the subject with the map before him. In the heart of western Washington is the Mediterranean of the West, with its safe entrance, deep channels, and capacious harbors. Dividing Oregon and Washington for about 270 miles is the Columbia River, which extends through eastern Washington across the international boundary, and, making a great bend, reaches the heart of Montana. 'It will be navigable, when improvements which are entirely practicable shall have been made, for 1,200 miles from its mouth, and with its navigable branches forms a great system of waterways for internal commerce. Oregon has 570 miles of navigable water front-300 miles on the Pacific Ocean and 270 miles on the Columbia River. The Willamette River is navigable for 120 miles from its mouth to near the head of the Willamette valley, and has several navigable branches. Along the coasts of Oregon and Washington are several valuable and important harbors.

This section possesses peculiar advantages for controlling the trade and fisheries of Alaska and the trade between the American possessions and British Columbia. It is to share in the rich and growing commerce between the Pacific coast of the United States and the Pacific coasts of Mexico, Central America, and South America. But it is when we turn to a study of its advantages for trade with Asiatic countries and the islands of the Pacific that the possibilities of its foreign commerce begin to dawn upon us. The commercial outlook of this region is westward. It is nearer by the breadth of a continent to the markets of the old East and of the Pacific islands than are the Atlantic ports. No just estimate can be placed upon the future volume and value of the trade with Asia. No one nation can control it, but the struggle to possess it will be mainly between England and our Pacific coast States. British statesmen, with proverbial

sagacity, foresaw this struggle, and it was not the result of accident that in settling the Oregon boundary we lost the island of Vancouver and half of Puget Sound. In this struggle the new North-west will have an advantage over California in distance, and in the fact that the ocean stream which rises off the coast of Asia and flows eastward to the American continent gives to every ship bound for a north-western port a gain of 20 miles in every 24 hours. The region will have an advantage over Great Britain in the local production of the staple articles required for the Asiatic trade.

He who should now undertake to estimate the commerce of the Pacific coast with Asia and the Pacific islands twenty-five years hence would find few who would not consider his estimate exaggerated. Looking toward the securing of this valuable trade, the Canadian government, with subsidies which dwarf into insignificance the aid given by the United States to the transcontinental railroads, pushed the Canadian Pacific across the continent through unproductive regions, and the British and Canadian governments have subsidized a line of steamers plying between the terminus of the Canadian Pacific Railroad upon Puget Sound and the ports of China and Japan. A cable line is projected, to connect British Columbia with the Sandwich Islands and China, and nothing that wise statesmanship, liberal subsidies, and an aggressive policy can do to secure the prize will be left undone. We have already an important and growing coastwise commerce on the Pacific coast, employing a large fleet of steamships and sailing vessels.

A large fleet of sailing vessels is engaged in transporting to foreign ports the exports of wheat, wool, fish, lumber, and other products of Oregon and Washington, and the flags of most maritime nations may be seen in their harbors. The value of products shipped from the city of Portland over the Columbia bar, to foreign and domestic ports, for the year ending July 31, 1889, was—foreign, \$6,634,989; foreign and domestic, \$16,197,-804. The number of vessels engaged in transporting the foreign export of wheat and flour from Oregon ports for the year ending March 31, 1891, was 60, of which seven were American, two German, and 51 British, with a total tonnage of 85,710 tons

They carried 3,675,943 centals, worth \$4,057,181, and received \$1.303,446 for freight, the freight charges amounting to 32.126 per cent. of the value of the cargoes. The number of vessels engaged in the same trade in Washington was 35, of which three were American and 32 British, with a total tonnage of 55.962 tons, carrying 1,897,490 centals, worth \$2,638,784. They received \$819,028 as freight, the freight charges being 31.03 per cent. of the value of the cargoes. The number of vessels engaged in transporting lumber to foreign countries from the two States—the larger number being from Washington—was 199, of which 115 were American, 36 British, 28 Chilian, 12 Norwegian, seven German, and one Hawaiian. Their aggregate tonnage was 172,391 tons; they carried 148,879,485 feet, worth \$1,612,357, for which was paid \$2,101,070 freight charges, being 130.31 per cent. of the value of the cargoes. There are regular lines of steamships plying between San Francisco and the ports of China and Japan, and steamships and sailing vessels are employed in bringing from Asiatic ports cargoes of tea, silk, and rice to the Columbia River and Puget Sound ports. Separate lines of steamships are projected to engage in the trans-Pacific trade between Portland and Puget Sound and the ports of China and Japan. During April of this year three steamships left Chinese ports with cargoes of Chinese merchandise for Portland, and it is understood that two of them belonged to the new line.

Fancy can hardly paint the future of this favored region. It is now nearly thirty years since I sought a home there. I was then enthusiastic as to the future of the section, and observant of the conditions which promised its development; and every year has increased my confidence in its great destiny. Events which then appeared to lie in the distant future have occurred in rapid succession, and circumstances now foretell a grander development than was then dreamed of and promise that civilization will reach, at the point where it completes its circuit of the globe, a state of unsurpassed and incomparable splendor.

JOSEPH N. DOLPH.

## FINANCIAL.

#### A GLANCE AT OUR FINANCES.

THE monetary situation in the United States for some time past has been animated by what may be described as two conflicting financial emotions. On the one hand, the European situation has not been reassuring, and this has tended to depression, not only through the closely sympathetic relations of the foreign bourses with New York, but also through the copious stream of gold recently attracted thither from America. But, on the other hand, the domestic financial situation has been good and the crop outlook excellent, so that the prospects plainly indicate ample railroad traffic and a large export of American food supplies in the Autumn to meet European necessities. These conflicting financial emotions alternately affected that great monetary barometer, the New York Stock Exchange, causing generally advancing prices, until the gold drain became so excessive as to overbear everything else, and early in May produced a reaction. The usual period of Spring settlements this year was passed without creating serious inconvenience or more than momentary and spasmodic tightenings of the money market. The great speculative constituency of Wall Street, always hopeful and generally buoyant in feeling, despite every setback, have steadily looked forward to the Summer and Autumn as sure to bring a season of prosperity, and in this view they seem to be sustained by most of the signs afforded by the indication of ample food crops at home and a serious shortage abroad.

Probably the paramount immediate phase of our finances has been the copious outflow of gold that has been going from New York to Europe in a steady stream, which early in May was swollen to the volume of a million a day. Much of this outflow has been in the face of a condition of the foreign exchanges which indicated no profit for the bankers making the shipment. But the foreign banks must have the gold, and they appear to have cheerfully recouped all losses on the It seems that in the early Spring a condition of financial transactions. anxiety was developed at Berlin, which led those in authority to adopt a policy tending to bring large supplies of gold to the Imperial Bank even though the process netted a loss. The golden stream was consequently set in motion from Paris and London, and soon afterward from New York, certain astute exchange brokers who are close students of the world's exchanges having discovered that the conditions of the import trade of the United States must sooner or later require large gold

shipments to Europe to adjust trade balances. The golden export went on, steadily swelling at New York, as it was discouraged at London and soon afterward at Paris; the French bankers showing, like those of Berlin, a feverish desire to accumulate gold. Then came a development which led the Bank of England to adopt a policy that would stop any drain from London and attract gold thither. Russia became restless and also wanted gold, and her finance minister indicated the intention of calling home her deposits, which were large in London, Paris, and Berlin, so that he gave an electric shock at the financial center. This action would seriously affect the Bank of England reserves, so that the antidote was at once applied; the discount rate was advanced by successive stages, and inducements were held out by increasing the price of American eagles to a figure giving a premium of more than two dollars per thousand dollars. These tactics were so effective that at the time this article is written, much of the golden stream flowing from America is being diverted from the continent of Europe to London.

Whether the United States can stand such a drain of gold, has often been the subject of serious consideration, but an important factor in the situation must not be forgotten, and this is that the United States is a large producer of gold, as of wheat, cotton, and silver, and it can afford to spare a generous surplus of any of its staple crops for foreign consumption. The Director of the Mint tells us that our mines are producing gold at the rate of thirty-three millions a year, and that during the past sixteen years the gold product of the mines of the United States has aggregated the large total of \$572,920,000, nearly the whole of which has found its way directly to the various mints. Then during the same period of sixteen years the ebb and flow of the golden tide across the Atlantic resulted, when the final balance was cast, in an actual excess of gold imported into the country, of \$93,466,000. This is notwithstanding the fact that during the first two years of the period 1875-76, there was an actual loss to the country upon the trans-Atlantic gold movement, of \$76,469,000.

During more than a half-year past, the United States has been the only leading country in the world that has had comparative financial health, and this has come mainly through its possession of the largest stocks of the precious metals, and the generally good condition of its It has sometimes caught contagious disease government finances. from Europe, but the attack has hardly been severe, and never critical. France, Germany, and England have all had sharp crises, and in each case when the stage became acute, the relief has been sought from America. The foreigners, short of ready money, have sold us back large amounts of American securities, and the people of the United States have absorbed them without much trouble, and have paid the excess of purchase money over the trade balance, probably in the export of gold. This will soon be followed, however, as it is confidently hoped, by the large anticipated export of produce when the crops are harvested, for which long-sight sterling bills are already being sold in

advance. If Europe has to buy food of us to anything like the amounts expected, there is a prevalent belief among our bankers that in the Autumn the golden stream across the ocean will again turn strongly westward.

The American crop outlook, as it is now forecast in the month of May, is indeed something almost beyond belief. In the first place the acreage sown in cereals largely exceeds anything ever before known in this country, the seeding of Spring wheat in the North-west during the last of April and the first week of May having been something unprecedented, showing that an enormous crop will be grown of that prime favorite in all the markets of the world—the "number one hard." The improved modern machinery of the farm has made this task of seeding comparatively easy. The farmers use drills sixteen and one half feet wide, and every mile they drive over these almost limitless expanses of land means the seeding of two acres; the sun and rains do all the rest until harvest. One drill driven twenty miles a day plants forty acres, so that sixteen teams can in a day seed a square mile. This indicates the vast product that impends; while in the second place crop shortages are complained of everywhere abroad, and particularly in France. To cheapen the importation of wheat and flour, the French government has already made a radical reduction in its import duties. Food must be got for the millions, and America is almost the only great wheat granary of the world which at the present outlook seems to indicate a probability of having an ample surplus. Then our corn crop, ready packed on the farm in the convenient form of the hog, will go by the shipload to the continent of Europe when we can avail ourselves of the ameliorated conditions of import which are about readmitting pork products to France and Germany. To increase the American export trade thus largely, will mean much for every business interest in the country—the shipping, the railroads, and kindred trades —and it particularly insures the general prosperity of the farmers, who are to-day specially gratified by seeing wheat quoted at a higher figure than has been known for years.

But above everything else, the chief indicator of American prosperity seems to be the railroad situation. This is the leading business interest, employing an enormous capital and sustaining a vast army of the population, so that whatever stimulates traffic and enlarges the earning power of the railroads is always sure to exert a healthy influence throughout the United States. The outlook for a good railway year has been the main sustaining power this season at the Stock Exchange, and this has been almost sufficient heretofore to overcome most of the discouraging developments, whether the outflow of gold or whatever else may have temporarily overcast the financial horizon. The recent meeting of the Western Traffic Association in New York has indicated the existence of reasonably harmonious relations among the railways, and an intention to prevent rate-cutting, which, while it gratifies spleen, usually paralyzes profits; so that a better era may be com-

ing. This is secured also by the solid fact, always heretofore potentially demonstrated in railroading, that when traffic is plenty enough to give all the railways ample occupation, there is no cutting of rates. The general financial outlook is consequently good, and there seems no reason to despair of the business interests of the Republic, for the current year at least, so long as the basis for trade seems so broad and we have the present large supply of the precious metals. The Director of the Mint says there are \$690,000,000 in gold in the country, and it is known that besides the large amounts in circulation and in the vaults of the banks, the Treasury held on May first, nearly \$281,000,000 in gold coin and bullion. Besides this actual gold, there was then also nearly \$387,000,-000 in silver coin and bullion in the Treasury vaults. With something like 668,000,000 of the precious metals thus held in the Federal Treasury as the basis of the business fabric, the United States would seem to be well equipped for the financial campaign during the remainder of the year of grace, 1891,

JOEL COOK.

PHILADELPHIA.

#### WESTERN LANDS AND MORTGAGES.

The year 1887 was one of financial adventure in the West. Railways were multiplied; towns were built and "boomed." People pushed into the arid public lands, and insisted that they were arable. Whole counties were settled and organized. It was the fashion to pre-empt land and to own town sites and city lots. Corporations innumerable were created for the promotion of all sorts of enterprises. Many financial follies were committed.

Speaking generally of the West, it may be said that sufficient time has now elapsed since the speculative fever culminated to enable us to appreciate those follies, to apportion the responsibility for them, and in some degree to estimate their results.

As to responsibilities, eastern investors should not let their losses, as they once did their profits, blind them to the facts. The western States are precisely what they were during the ten years prior to 1888, when western investments were almost invariably profitable, and often enormously so. The resources, the soil, the climate, are unchanged. The western people, too, are the same. Whatever losses eastern investors suffered are chargeable not to western territory or people, but chiefly to the speculative fever which culminated in 1887, and which was produced quite as much by the eupidity and folly of the eastern investor as by any other cause.

But the investor is not so much interested in the origin of the mistakes of 1887 as he is in the results and in the present outlook. These results and this outlook are by no means what his imagination, and the newspapers, and those eastern brokers who are quietly buying in western securities have painted them. Let the eastern investor beware of

panic; for, just as some losses were entailed by over-confidence in 1887, so additional losses are threatened now by too little confidence.

As to farm mortgages, there need be little apprehension as to loans not now in default. Mortgages made in 1887 and 1888 which have been taken care of during the past two or three hard years will be paid in full. The fact that interest on such mortgages has been kept up means either that the land is good, interest-earning land, even in bad times, or that the borrower is financially responsible and likely to remain so. Usually it means the former; frequently it means both.

As to defaulted loans, of course some of them were bad when made, and are much worse now. They were purchases, not loans. But there were also many good loans made, now in default, the security still good, but the borrower bankrupt. There will be considerable loss on farm loans made east of the Rocky Mountains and west of the hundredth meridian; and also on loans made on some classes of so-called city property. Generally speaking, however, it seems likely that east of the hundredth meridian a large percentage of the defaults will be made good during the next twelve months. Many have been made good since January first. Western farm lands east of the hundredth meridian are in demand both for purchase and for lease. Where in 1890 farms could not be sold at any price, in 1891 they are actually sold at from ten to twenty per cent, advance upon the former prices asked. In the Spring of 1891 tenants were begging for farms that begged for tenants in 1890. This means that there has been a considerable returning from the arid parts of Kansas, Nebraska, and Colorado, from the Pacific coast and from the East, to the arable lands of Kansas, Nebraska, Missouri, and Iowa. There has also been something of an exodus from the towns and villages to the farms. Farmers are, generally speaking, prosperous throughout all the arable region. Their products are bringing high prices. There is no great surplus to depress prices during the coming Summer and Autumn. Crop prospects are excellent. Farmers have stopped borrowing money, and have set to work in earnest to pay their debts. The supply of farm-mortgage money more than equals the de-Official records show that the mortgage indebtedness is diminmand. ishing. Thus a carefully-prepared report of the register of deeds of one average Kansas county shows that the real and chattel-mortgage indebtedness of the county was reduced in 1890 by half a million dollars, and in the first three months of 1891 by almost a quarter of a million more. It is estimated that in the State of Kansas the total recorded indebtedness was reduced at least ten millions in 1890.

The census will show a large grand total of western mortgages—a fact which investors may easily misunderstand. More than half of this indebtedness will be shown to be for purchase money. A great proportion of purchase-money indebtedness is, of course, held in the West. Men owe for lands purchased, and hold claims against lands sold. Such indebtedness may be very large indeed, and still mean the reverse of bankruptey.

Investors need not be alarmed by the recent political revolution. Unquestionably, in the campaign, the Alliance leaders talked something very like repudiation. But on such topics they did not carry the rank and file with them. The leader himself, in office, is different from the leader on the stump. The Alliance success was chiefly the result of low prices and bad crops. The farmer was discontented, and he determined to try what virtue there might be in politics. He had no revolution in mind; no definite economic plan to carry out. Change of opinion, enlightenment, and conviction regarding economic questions did not create the Alliance; discontent created it. If the movement hereafter leads to enlightenment and conviction, it will be well for the country. If it does not, the Alliance will be short-lived. In any case, nothing revolutionary need be apprehended.

Investors will do well to allow the companies that made their loans to manage them, except where they have real reason to suspect dishonesty or incapacity. Losses in western mortgages, lands, and mortgage-company stocks will not be great, considering the grand total of such investments made; and these losses will be insignificant compared with the losses in other kinds of investments concerning which there is no outcry. They will be insignificant, for example, compared with the losses in the New York stock market for 1890.

The East has invested largely in the stock of western mortgage companies. Some of these companies are irretrievably ruined; many have suspended payment, and probably more will do so. Few, if any, of the older companies have failed. The mushroom companies went down or will go down. Some of these companies were wrecked because their loans were made with a view, not to the amount of the security, but to the amount of commission offered. Such companies were ready to advance money upon mere acres, regardless of whether those acres were good ground or stony ground, swamp land or sand hill. Other companies have come to grief because they were used mainly for building uncalled-for houses in premature and unpeopled town sites and additions to town sites. The quicker such companies are out of the field, the better it will be for investors. It is to be observed that the failures, after all, have not been very numerous in proportion to the number of companies in existence. It is probable that the day of the large mortgage companies, with their branch offices, agencies, and subagencies, has passed. The borrower and lender will hereafter get closer together. There will be fewer middle-men to shirk responsibility.

Western mines are now, generally speaking, beyond the gambling point. Miners are working low-grade ores necessarily in a conservative manner. Owing to abundance of capital and improved machinery the output is very great. A great part of mining stock scattered over the East is, of course, worthless. It was the product of the mining excitement of ten years ago. The irrigated lands of Colorado are rising in value, as are also the securities of well-managed irrigation companies.

Western municipal securities are being promptly met. This is gen-

erally true, even of western Kansas and Nebraska, where financial reverses have been most severe.

Nothing can be said which is generally applicable to miscellaneous enterprises and securities, except that they have suffered from general financial depression, and will improve with the general improvement.

Companies operating under municipal franchises, such as gas, electric-light, water, and street-railway companies, depend for their prosperity upon the condition of the cities where they are located. Such companies have been "promoted" somewhat beyond the real demand.

The bank record of the West during the past three years is remarkable, considering all the conditions. It has been clearly demonstrated that western banking capital is under the control of sound and conservative financiers. During the past winter the bank reserves have been enormous. No speculative loans have been made, and few of any kind. The demand for loans has been unusually light. The banks, of course, have made no money. Fears of panic have now passed, and reserves are diminishing. Attention is directed to the reports of Kansas national banks called for on the 4th of May.

J. WILLIS GLEED.

TOPEKA, KANSAS.

#### SOUTHERN FINANCIAL INTERESTS.

FINANCIALLY, the Southern States are glowing with health and promise, and rejoicing in the consciousness of their essential greatness. No furor has been created by sensational advertising, but the world has been astonished by the latest statistics of wonderful growth as shown in the national census of 1890. The sum of all is in the fact that the assessed value of property in nine States is estimated by the census officials to have grown from \$3,000,000,000 in 1880 to \$6,000,000,000,000 in 1890.

The reports of the census everywhere tell of enlarged and enlarging areas of cultivation, of new mines of coal and iron, excellent in quality and inexhaustible in quantity, of new manufactories in every department of human industry. All the bases of wealth and of sound and satisfactory finance are here; and in my opinion Southern enterprises are animated, sustained, and fortified by as sincere and high a regard for commercial credit and personal honor, and by as profound a conviction of the necessity of fair dealing, as are to be found anywhere.

The cotton crop, which has steadily advanced since the war, has increased from 5,000,000 bales in 1879 to more than 8,000,000 bales in the past year, and every fiber of it finds a near and ready market at good prices. Our fruits and vegetables and general agricultural products go on improving in quantity and quality and are more and more in demand. The market goes on enlarging with improved transportation and familiar use in distant States. The trade in fruits and vegetables has grown into an immense business. Our coal and iron attract the

attention of the world, the product now equaling that of the whole country two decades past. Our railroads constitute an arterial system. They are natural and legitimate highways, connecting the most important sources of production with the great centres of trade, and they are so located and distributed as, for the most part, to exclude ruinous competition and to discourage paralleling. They have, through their main channels and feeders, built up and enriched their territories, and, latterly, well remunerated their operators.

Under these circumstances our financial condition has steadily improved and is improving. Wealth has been generally diffused, and has increased in the hands of individuals. Growing wealth and development have immensely stimulated enterprise, and more and more capital is wanted for legitimate ventures. Health and growth are manifest everywhere. Our chief desire is peace and non-interference from governmental sources.

The free coinage of silver has been and is now more or less a sensation, and to a certain degree has affected us as a bare future danger. Other causes are now, to some extent, quieting our investment market. But the gold-paying feature in securities is so far regarded and so far a recommendation as to prove that free coinage is an apprehension and a danger ahead. Yet there is not enough of this craze seriously to affect our finances. The people of the South have seen the miserable demoralization, distrust, gambling, and destruction of regular trade that comes of a debased currency. And it is easy to appreciate the great disadvantage that would come to our farmers, our manufacturers, and our merchants, but most of all to our wage-earners and salaried men, if they were paid for their products and hard labor in a currency that is itself liable to fluctuate in value and in purchasing power. American wealth, and skill, and labor cannot afford to be represented in foreign lands by a currency that has no dignity beyond its market A debased currency hastened the fall of the Confederacy. A currency that has never been surpassed has helped and insured a wonderful prosperity since the war. And we are not likely to exchange a blessing for what will be certainly a most dangerous experiment if not a delusive evil.

At this time it seems to me very plain that the securities and properties of the South rest on the strongest and surest foundations that finance can ask; that they are full of assured value and excellent promise. And I doubt whether anywhere else on earth so many elements and conditions combine to invite capital, and enterprise, and intelligence, and character.

The Southern States, out of utter ruin, have adjusted their debts and re-established their credit. Municipal loans are deservedly in high credit and favor. City debts are limited by charter to a safe percentage of their taxable property. Our railroad mortgages are small compared with the value of their property. And in very many cases stocks and income bonds represent a small capitalization of actual value.

Our State, municipal, and railroad bonds are to be had at low prices compared with the same class of securities elsewhere, and our income bonds and stocks are low and full of promise to those who have the wisdom to see their value and the nerve to act on their own judgments. Many of our stocks, dividend-earning and paying, are exceptionally low.

There is one event, daily growing nearer to its accomplishment, which will be of incalculable importance to the whole South. The completion of the Nicaragua isthmian canal promises to make a new and grander Mediterranean of our Caribbean Sea and Gulf; to make of Galveston, New Orleans, Mobile, and Tallahassee a Venice, a Genoa, a Florence, and a Marseilles, and to make the city of New York the settling point of the world. The effect of this great achievement will be to enrich the whole country and to make us one great people as nothing else can do.

JOHN L. WILLIAMS.

RICHMOND, VA.

### BOOKS OF THE MONTH.

The Life and Times of John Dickinson (J. B. Lippincott Company), by Charles J. Stillé, worthily revives the memory of an early statesman, whose career was distinguished not only by great services to the colonies, but also by a robust independence. A leader in the opposition to the Stamp Act, and for some time after the enforcement of the Boston Port Bill, according to Bancroft, "controlling the counsels of the country," Dickinson did not hesitate to sacrifice his popularity and to incur wide-spread odium by resisting what seemed to him precipitate measures, like the signing of the Declaration of Independence. His "Vindication" of his course during the Revolution is a document of refreshing vigor. Indeed, the story of his life shows a personality so strong and sound that the patriotic Pennsylvanian must sigh as he closes the book and contrasts the weakness and flabbiness which characterize the Commonwealth's public men a century later.—"Ministers" is the first entry in a list of things required for the Massachusetts Bay Colony, which is preserved among the earliest records, and it is most fit that a series on the "Makers of America" should include the Life of Francis Higginson (Dodd, Mead & Co.), by his descendant Thomas Wentworth Higginson. The first minister in this colony, he lived little more than a year after his arrival, but his leadership was so marked that Cotton Mather placed his name at the head when he wrote the memoirs of more than thirty of the founders of New England, His "Description of the Commodities and Discommodities" of the region, written in 1630, in the quaint style of that day, is an extremely interesting feature of the book.—The Life of Ferdinand Magellan (Dodd, Mead & Co.), by F. H. H. Guillemard, is the latest issue in the series of "The World's Great Explorers." It was high time that such a book should be written, for no biography of Magellan in the English language had ever been published. In truth, the first circumnavigator of the globe has not yet received from the world the recognition which his eminence in exploration should have assured him. Mr. Guillemard brings out well the sturdy qualities of the great Portuguese.

The Influence of Sea Power upon History, 1660-1783 (Little, Brown & Co.), by Captain A. T. Mahan of the United States Navy, is an attempt to fill an obvious gap in historical writing. There have been chroniclers of naval occurrences in plenty, but they have generally confined themselves to the events which they described. On the other hand most historians of nations and of periods have not been familiar with maritime affairs, and so were not likely to appreciate fully the influ-

ence of naval victories and defeats. Captain Mahan has sought to show that the real bearing of sea power upon the course of history, from the opening of the sailing-ship era to the end of the Revolution, was far greater than is supposed. An enthusiast in any profession always runs great risk of exaggerating its actual share in the development of the world, but Captain Mahan makes out his case, and in a very interesting way.—The Old Navy and the New (J. B. Lippincott Company), by Rear Admiral Daniel Ammen, U. S. N., touches the same subject upon its personal rather than its philosophical side. It is essentially the story of his life by a veteran in the navy, who was appointed midshipman in 1836, by the same Congressman Hamer, by the way, who secured Grant a place at West Point. The boys were neighbors and playmates (Ammen saving Grant from being drowned at the age of seven), and they continued life-long friends. Ammen's principal purpose in these memoirs is to note the changes in naval architecture and armament during his career, and their effect upon naval life, and this he does in a gossipy style, which preserves not a few trifling incidents, but furnishes a great mass of really significant facts. An appendix contains a number of Grant's personal letters, written chiefly during his tour of the world, and bearing fresh witness to the deep interest which he shared with Ammen in the Nicaragua Canal project.

Ten Years in Equatoria and the Return with Emin Pasha (Frederick Warne & Co.), by Major Gaetano Casati, is the latest contribution to our fast-growing stock of information about Central Africa. Casati is an Italian who, after a creditable service of twenty years in the army, resigned in order to study geographical science and eagerly took an opportunity to join the ranks of explorers. His work adds some interesting facts to the world's knowledge of Equatoria, but its chief value consists in the light which it throws upon the curious character of Emin Pasha, with whom he was closely associated.—As "the Dark Continent" is exposed to view, the curiosity of the world centers more and more about those polar regions which have not yet surrendered their mysteries. The First Crossing of Greenland (Longmans, Green & Co.), by Fridtiof Nansen, is the record of an Arctic trip which solved one of those mysteries, and proved that the interior is only one mass of unbroken ice. The distinctive feature of this expedition was its successful use of the "ski," a Norwegian form of the ordinary snow-shoe which is a most extraordinary piece of foot-gear. The description of the Eskimo race is exceedingly interesting and valuable, done with a sympathetic touch which arouses also the reader's pity for what Nansen calls "a dying people, who, long since wounded by the venomous sting of external culture, are now perhaps past recovery."—The growing discussion as to closer relations with our northern neighbors has created a demand for such a book as Canada and the Canadian Question (Macmillan & Co.), by Goldwin Smith, which sketches the history of the country, outlines its constitution and considers the problem of its future. Professor Smith believes that "the primary forces" are working toward a union with this nation, and that it is only a question of time when the crisis will arrive.—The Question of Copyright (G. P. Putnam's Sons), compiled by Geo. Haven Putnam, brings together various sketches by several writers on the nature and origin of copyright, its development in England and the United States, the struggle for international copyright, and the bearing of existing laws on the interests of writers and their readers. Such a compilation is timely, and nobody is better qualified to elucidate the subject than Mr. Putnam, whose connection with the long struggle for justice to authors has been most honorable.

Electricity (D. Appleton & Co.), by Emma Marie Caillard, professes to do no more than give an outline of modern electrical science, which can be understood by people who have never studied the subject and will never have the time for study, but who want to know enough about this wonderful subject to understand the principles of the electric lamp or the electric car. The expert is sure to pick an occasional flaw in such a book, but the untrained readers for whom it is prepared will find it trustworthy in all important points.

The Old Documents and the New Bible (James Pott. & Co.), by J. Paterson Smyth, professes to be "an easy lesson for the people in Biblical criticism" and makes good the claim. Popular interest in all questions relating to the authenticity of the Scriptures was never before so keen as now, and this book is the first of a series intended to bring the results of modern study within the easy comprehension of the "plain people."—Hindoo Literature: or the Ancient Books of India (S. C. Griggs & Co.), by Elizabeth A. Reed, is an attempt to compress within a volume of 400 pages the chronology of these books, their place in the world's history, a résumé of their teachings and specimens of their literary style—in short, to furnish an intelligible idea of Hindoo literature in a condensed form.

Paris of To-day (Cassell Publishing Company), translated from the Danish of Richard Kaufmann by Miss Olga Flinch, proves to be the Paris of 1889; and as the illustrations are of that year's scenes, the women depicted inevitably lack that haut ton which is the chief characteristic of the Parisian woman. The illustrations, which abound throughout the book, range from the atrocious to the good, most of them having at least the merit of spirit. The text treats of the city and its people in all their phases—painters, writers and savants, actors and theaters, cabmen and nurses, street-scenes and night revelries, festivals and funerals, and the great exposition. The style is lively, and the book touches so many sides of the French capital that it is full of entertainment.

Woman's Work in America (Henry Holt & Co.), edited by Annie Nathan Meyer, contains eighteen essays by representative women on the achievements of the sex in various fields of labor. The editor sought to secure "a total absence of railing against the opposite sex," and the candid male reader must confess that men are here treated with far

more consideration than they had any right to expect. It is a dreary and discreditable story of prejudice which most of these writers have to tell, and the wonder is that there is so much to show in the face of such obstacles and opposition as the pioneers in every direction had to encounter.

The man who can write a good short story is sure of a warm welcome from the reading public. Richard Harding Davis in Gallegher and Other Stories (Charles Scribner's Sons) has given more than one proof of uncommon ability in this direction. His danger seems to lie in a tendency to strain after effect, as in "The Other Woman."—Mr. H. C. Bunner has been writing longer than Mr. Davis, and when he is at his best, he writes delightful short stories. Zadoc Pine and Other Stories (Charles Scribner's Sons) contains some which reach his highest level.—Stories of Old New Spain (D. Appleton & Co.), by Thomas A. Janvier, take the reader among scenes that are full of novelty, and the style is good enough to repay reading for that alone.

## HISTORY, BIOGRAPHY, TRAVEL, AND ESSAYS.

- Anderson, J. H. History of George the Third's Reign. With three colored maps and 19 maps in text. Longmans, Green & Co. Cloth, \$1.50.
- FREEMAN, EDWARD A. The History of Sicily, from the Earliest Times. Two volumes. Macmillan & Co. \$10.00.
- Gardiner, C. M. S. (compiler). Maxims and Gleanings from the Writings of H. P. Liddon, D.D. Longmans, Green & Co. Cloth, 60 cents.
- Gardiner, Samuel Rawson, LL.D. A Student's History of England, from the Earliest Times to 1885. Vol. II., a.d. 1509–1689. With 96 illustrations. Longmans, Green & Co. Cloth, \$1.20.
- Houston, William, M.A. (editor). Documents Illustrative of the Canadian Constitution, with Notes and Appendixes. Carswell & Co. Cloth, \$1.00.
- Hunt, Leigh. Essays of Leigh Hunt. Selected and edited by Reginald Brindley Johnson. With introduction. Portrait by S. Lawrence and etchings by Herbert Raitton. (The Temple Library.) 2 vols. Macmillan & Co. \$4.00.
- Parry, Edward Abbott. Charles Macklin (Eminent Actor Series, edited by William Archer.) Longmans, Green & Co. Cloth, \$1.00.
- SAINT-AMAND, IMBERT DE. Marie Louise, the Island of Elba, and the Hundred Days. Translated by Elizabeth Gilbert Martin. With portrait. Charles Scribner's Sons. Cloth, \$1.25.

#### POETRY.

- Crane, Thomas Frederick, A.M. Chansons Populaires de la France. (Knickerbocker Nugget Series.) A Selection from French Popular Ballads. With introduction and notes. Illustrated. G. P. Putnam's Sons. Half calf, \$1.50.
- SLADEN, DOUGLAS (editor). Younger American Poets, 1830-1890. With an appendix of Younger Canadian Poets, edited by Goodridge Bliss Roberts. Cassell Publishing Co. Cloth, \$2.00.
- Taylor, William Stitt. Man Immortal: An Allegorical Poem. With portrait. J.B. Lippincott Co. Cloth, \$2.00.
- Tomlin, Edward Locke. Rhymelets. Longmans, Green & Co. Cloth, \$1.25.

#### FICTION.

- BOUTON, JOHN BELL. The Enchanted: An Authentic Account of the Strange Origin of the New Psychical Club Cassell Publishing Co. Cloth, \$1.50.
- BRÉHAT, ALFRED DE. Bras d'Acier; or, On the Gold Path in '49. Adapted from the French by A. Estoclet. Cassell Publishing Co. Paper, 50 cents.
- FAWCETT, EDGAR. A New York Family: A Novel. With 36 illustrations by Thomas Nast and others. Cassell Publishing Co. Paper, \$1.00.
- Harland, Henry (Sidney Luska). Grandison Mather: or, An Account of the Fortunes of Mr. and Mrs. Thomas Gardiner. Cassell Publishing Co. Paper, 50 cents.
- Harrison, Mrs. Burton. The Anglomaniacs. Cassell Publishing Co. Paper, 50 cents.

- Janvier, Thomas A. Stories of Old New Spain. D. Appleton & Co. Cloth, \$1.00.
- Serrano, Mary J. (translator). The Friend of Death: A Fantastic Tale. Adapted from the Spanish. (The "Unknown Library.") Cassell Publishing Co. Cloth, 50 cents.
- Jókal, Maurus. There Is No Devil; A Romance. Translated from the Hungarian by F. Steinitz. Cassell Publishing Co. Cloth, \$1.00.

#### EDUCATIONAL.

- Beal, E. A., M.D. Foods and Beverages. (The Information Readers, No. 1.) Boston School Supply Company. Cloth, 60 cents.
- FLOWER, WILLIAM HENRY, and LYDIKKIE, RICHARD. An Introduction to the Study of Mammals, Living and Extinct. Macmillan & Co. \$6.00.
- Harper, William Rainey, Ph.D., and Tolman, Herbert Cushing, Ph.D. Eight Books of Cæsar's Gallic War. American Book Co. Cloth, \$1.20.
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SIR CHARLES WENTWORTH DILKE, Bart. (born in England in 1843), is the best authority in England on colonial subjects. His book, "Problems of Greater Britain," is one of the most important books of recent years.

THE HON. WILLIAM McADOO was born in Ireland, October 25, 1853, was educated in Jersey City, and is a lawyer. He served in the New Jersey legislature and was a Democratic member of the last Congress.

GEN. FRANCIS AMASA WALKER (born in Boston, 1840) fought in the civil war, gaining the brevet of brigadier-general. In 1870 and 1880 he was superintendent of the census. In 1881 he became president of the Massachusetts Institute of Technology.

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SENATOR WILLIAM MORRIS STEWART was born in Lyons, N. Y., August 9, 1827, was educated at Yale, settled as a lawyer in California, and in 1860 removed to Nevada. He served in the United States Senate as a Republican in 1864–75 and was elected again in 1887.

PRESIDENT WILLIAM DE WITT HYDE (born in 1858) was graduated at Harvard in 1879 and in 1885 he became president of Bowdoin. He is one of the youngest and most vigorous college presidents.

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# The Forum.

### JULY, 1891.

## THE EMPEROR WILLIAM II.—HIS CHARACTER AND HIS POLICY.

I.

Gambetta, who, whatever may be thought of his character, was a keen politician, once observed that the death of the Emperor William I. would be one of the greatest events of contemporary history. He was right, although, disappearing himself before that octogenarian sovereign, he could not anticipate that the heir to the Imperial crown, then in the prime of manhood, the noble and unfortunate Frederic III., would be carried away by a premature death after a reign of only 99 days. He was right, because the accession of William II. seems destined to mark a still more important and thoroughgoing difference from the past than the government of Frederic III. probably would have shown if he had lived to reign.

As prince the present Emperor was a much-misjudged man; he was chiefly known as an ardent practical soldier and an eager student of military science. The so-called Count Vassili (now unmasked as a French spy, M. Mondion) in his interesting but libellous book, "La Société de Berlin," even credited him with the ambition of emulating the feats of Frederic II., and at the same time represented him as a libertine, which was absolute slander, his domestic life being a model of purity. In politics he was be-

lieved to be a devoted pupil of Prince Bismarck, adhering besides to the divine right of kings, with a strong leaning to reactionary tendencies. This picture has been completely refuted by a threeyears' reign. The truth was that at that time Prince William's character was not yet formed, as was but natural with so young a man. He had inherited the traditional sense of duty so conspicuous in the Hohenzollerns, he was a devoted soldier and showed a special interest in the Navy, but he was not less zealous when for a year he discharged the task of participating in the civil administration of the Province of Brandenburg. He had made a love-match—marrying a Princess of ancient descent but of modest position, Victoria of Augustenburg—and has ever since been most happy in his family. In politics he certainly admired Prince Bismarck's foreign policy, which had raised Germany to a first-rate power and made Berlin the centre of European affairs, and it was but natural that he was not equally conversant with the Chancellor's home policy and its disastrous effects. Prince William in the beginning of 1887 could have no idea that within less than two years he would be called to the throne, for his grandfather, notwithstanding his age, was still hale, and at his ninetieth birthday showed astonishing vigour, and his father was at fifty-six apparently enjoying excellent health. When, however, the unexpected arrived, and both his predecessors one after the other were snatched away, we may confidently assume that their youthful heir took the seat of his forefathers with the firm resolution to govern as well as to reign. Under William I. Bismarck had enjoyed a nearly absolute sway; the Emperor did not allow him to interfere in military affairs, but for the rest he was master. William I. was certainly not blind to his overbearing Chancellor's faults, but he thought him indispensable. In a confidential conversation with his nearest personal friend, the late Prince Anton von Hohenzollern, he said: "I must support Bismarck with all his intolerable qualities, because he is necessary for the prestige of the German Empire," a saying which marks at once the late Emperor's perspicacity and his high sense of duty. Besides this, the Emperor wanted rest and at his age was averse to all change.

His lamented son, succeeding him, was too ill to inaugurate

a new system, although his programme of government, with which he took the Chancellor totally by surprise, showed that he had ideas of his own.

When William II. came to the throne, Bismarck expected to enter upon a new lease of unlimited power, for the present Sovereign had ever been one of his ardent admirers. As his press confidant, Moritz Busch, has told us, the Chancellor said in 1885: "I rely upon Prince William, who has the character and the spirit of an officer of the Guard, and that alone can save us." At first it seemed that his belief was not unfounded, everything going on as before; but soon signs of discord arose. A series of imprudently-begun trials proved abortive and cast disgrace on the government, and the slanderous attack on Sir Robert Morier, British Ambassador at St. Petersburg, ended in a signal defeat. In March, 1889, the Minister of Finance had drawn up a bill for the reform of the income tax, which had been sanctioned by the Emperor; suddenly Prince Bismarck interfered, declaring that it was against the agrarian interest, and the Landtag, summoned expressly to discuss the bill, was dismissed "re inacta." Count Waldersee, the Chief of the General Staff, an eminent officer and an independent man, standing high in favour, had for years been a thorn in the side of the Chancellor, who looked upon him as a possible rival. He had tried to overthrow him during the short reign of Frederic III., but had not succeeded, Field-Marshal Moltke protesting that the General was indispensable in his place. In the summer of 1889 Waldersee accompanied the Emperor on his excursion to Norway, when a letter appeared in the "Hamburger Nachrichten," a paper known to be inspired by Bismarck, to the effect that the General in a memoir had directed his Sovereign's attention to the threatening character of Russia's armaments, and had advised, in contradiction to the Chancellor's policy, the forcing of war upon Russia. Waldersee from Trondhjem addressed a telegraphic denial to the paper, stating that he had never presented such a memoir, but the "Nachrichten," although bound by law to publish such rectification verbatim, did so only in a garbled form and in small type. At the same time the "Norddeutsche Allgemeine Zeitung," Bismarck's avowed organ, published a mysterious article to the effect that, according to

General von Clausewitz, a late eminent writer on strategy, war is only the continuation of a certain policy, and that therefore the Chief of the General Staff ought to be under the orders of the Foreign Minister.

Even in foreign politics the Chancellor began to blunder, although this was mostly the fault of his eldest son, who had inherited all his rudeness without any of his talents, and whom he had made Secretary of State. He entered upon an ill-advised quarrel with the Swiss Federal Council, because a German police agent, Wohlgemuth, who had acted as spy and "agent provocateur" against German Social Democrats in Switzerland, had been imprisoned for a week and then expelled. The "Norddeutsche Zeitung" called Switzerland a "savage country," and the "Hamburger Nachrichten" suggested its partition among its three neighbours. The Chancellor denounced the Treaty of Settlement concluded with Switzerland April 27, 1876, and demanded that only those Germans should be received on Swiss soil who could produce a certificate of good behaviour from their own authorities. The Federal Council, however, in a dignified answer declined to entertain such a demand, which would involve an encroachment on the Swiss right of asylum, and the campaign ended in a defeat of German diplomacy.

Such were the forebodings of the coming storm which was to end in Bismarck's dismissal, but it was not before the winter session of the Reichstag that the clouds were seriously gathering, and it was the social question which led to the final rupture. Bismarck's remedy against Social Democracy had been State Socialism coupled with stern repression of the Social Democrats. On the one side he went so far as to affirm in the sitting of the Reichstag of the 8th of May, 1884, the right to employment; on the other side he had enacted in 1872 an exceptional law against Social Democrats, which since had been prolonged every two years and which outlawed a large class of the population. The Chancellor did not perceive that this policy of intoxicating the head by big words, while reserving the right to break the skulls of those who might take those words too much in earnest, was inconsistent. The consequence of the acknowledgment of the right to employment would be the obligation of the State to

organize labour, and that is precisely what the Socialists demand. History proves that it is a most dangerous policy to acknowledge the principle of a great social movement and at the same time to suppress by the police untoward manifestations of that movement. Such persecution only makes martyrs and increases the force of the revolutionary element. In fact, the law against Social Democracy had proved abortive, the number of Socialist electors having risen from 112,000 to 1,127,000.

But, far from acknowledging his error, the Chancellor presented in the autumn session of 1889 a bill tending to make the law against Social Democracy a permanent one, and to render it more stringent by a clause providing that the police should be entitled not only to expel temporarily Social Democrats from large towns, but to banish them perpetually. This was too much even for the long-suffering National Liberals, his devoted followers, who were ready only to grant a temporary expulsion for two years. Prince Bismarck was of opinion that the government should insist upon their demand, but "faute de mieux" should accept what they could obtain. Yet the government remained mute and the bill fell to the ground. The reason, which at that time was not generally understood, was that there existed already a hitch between the policy of the Chancellor and that of the Emperor, who had arrived at the conviction that the law against Social Democracy had not only proved barren, but had increased the power of the very party against which it was aimed. William II., who for years had devoted special attention to the labour question, was further convinced that what was most necessary for social peace was a law for the protection of women's and children's labour, Sunday rest, etc. But that was exactly what the Chancellor had opposed to the utmost; for years the Reichstag had discussed drafts of such a bill, but they had fallen flat before the strenuous resistance of Bismarck, who was entirely in favour of the large landed proprietors and the great industrials. The Emperor now resolved to overrule the Chancellor's opposition, and on February 4, 1890, an Imperial decree appeared in favour of the protection of women's and children's labour and announcing the invitation of an international conference for that end. Prince Bismarck resigned the ministry of commerce and

was replaced by Herr von Berlepsoh, who was to preside over the conference.

These events, causing the greatest excitement, fell in the midst of the elections for the new Reichstag, and their result was a crushing defeat of the Chancellor, the former docile majority a coalition of the Conservatives and National Liberals brought about in 1887 by a false alarm of war-being scattered to the winds. Bismarck, however, did not despair, and told the ambassador of a great power that he was preparing a new combination by which he would vanquish his opponents, his plan being to form a coalition of the Conservatives with the Ultramontane Centre party, for which purpose he had a confidential interview with the leader of that party, Dr. Windthorst. But it was exactly this interview which brought matters to a crisis. Bismarck had asked the Emperor that, in virtue of a Cabinet order of 1852, his colleagues should be bound to submit beforehand to him any proposals of political importance before bringing them to the cognizance of the Sovereign. The Emperor had refused and insisted upon the cancellation of that order, and now when he heard of the Windthorst interview he called upon the Chancellor, asking to hear what had passed in that conversation. Bismarck declined to give any account of it, as he could not submit his intercourse with deputies to any control, and added that he was ready to resign if he no longer possessed his Sovereign's confidence. But he did not send in his resignation until, to his astonishment, an Imperial aide-de-camp came in the evening to remind him of his words by command of the Sovereign. Even when he was thus compelled to offer his resignation he never dreamt of the possibility of its being accepted. The step was intended as a means of pressure for bringing the Emperor back under his sway, such as he had repeatedly used under William I. when that monarch would not comply with his demands. But he was mistaken in his "new lord;" the resignation was forthwith accepted. He was thunderstruck when he received the Emperor's speedy answer, and a stormy scene ensued; but his reign was at an end. The means by which William II. tried to gild the pill by creating him Duke of Lauenburg and "General" Feld-Oberst" could not deceive him as to the fact that he had

not resigned but had been dismissed; he said as much in his farewell address to the Federal Council, and he called the homage he received at his departure from Berlin "a first-class funeral."

It was indeed a curious nemesis under which the Iron Chancellor fell after having enjoyed for nearly 27 years a power such as never since Richelieu had been wielded by a Prime Minister. In order to lower the importance of the Parliament he had always insisted that in Prussia it was the King that governed, evidently with the same meaning with which the Jesuits have striven to exalt the power of the Pope; that is, intending to wield that power themselves by their influence upon the Supreme Pontiff. He had once said that a good horse dies in harness, and he was confident of doing so himself. He had recently, according to his own words, assured the Czar that he was sure of the unbounded confidence of his new master, and that he would remain Chancellor till his death. As to the future, he had carefully prepared, by a nepotism hitherto unheard of in Germany, for the transfer of the Chancellorship to his eldest son. He had exalted in Prince William the consciousness of monarchical power, and he now succumbed to a simple decree of that power which he had used as a screen for the exercise of his own sway.

#### II.

If the choice of fit ministers is always the proof of the capacity of a sovereign for government, the Emperor William II. may already be said to have been successful.

The successorship of Bismarck was a great difficulty. The true test of the highest order of statesmanship is its success in forming a school. Such statesmen were Pericles, Cæsar, Charlemagne, Lord Chatham, Washington, Pitt, Stein, and in our days Cavour. When they died they left successors able to continue their work, and the reason is that they believed in institutions rather than in men. Marchese d'Alfieri has well said of Cavour:

"His creed was the rule of law. He admitted no accidents in government, no suspensions, no coups d'état; if the law was faulty it should be changed, but by Parliamentary discussion, not by the arbitrary intervention of decrees or by the votes of packed majorities obeying personal in-

terests. His belief was in no 'one man's theory,' in no passing expedient of the hour; his belief was in Acts of Parliament." \*

To that creed he remained true to his end. On his death-bed, amidst his ravings, he turned to the state of Naples and ex claimed: "No state of siege, none of these measures of absolute governments. Any one can govern with the state of siege; the country must be moralized." †

With Bismarck it was the reverse; he always adhered to the Casarian system—the "one man" who undertakes to think for the whole people. To govern was, according to his idea, not to persuade, but to command, and representative government was to command with a flourish of speeches, which should always end in a happy subserviency to the ruling minister. In fact, his opinion was "L'Empire c'est moi," and enemies of the Empire were always those who opposed his policy of the hour, his imperious nature rebelling against all control. Such a man could form no school; as soon as he saw a rising talent he pressed it into his service or crushed it. Therefore when he was dismissed, Germany had able diplomatists and administrators, but no statesmen; it was out of the question to choose one of the ambassadors or great nobles, who may be good in their way but are political nonentities, to step into the shoes of the all-powerful minister. Neither had the parliamentary parties a man fit to take the helm of the State. For this reason I maintained, years before the question was likely to become practical, that the only possible successor of Bismarck would be a politically gifted general, a man at once imposing and conciliatory; and the choice seemed to me to lie between Count Waldersee and General Caprivi. The late Dr. Windthorst, one of the keenest politicians of the Reichstag, when I discussed that question with him, entirely shared this opinion, but gave a decided preference to Caprivi. He had already been Secretary of the Navy, and in this position had shown great administrative capacity and the gift of preserving toward Parliament an attitude at once firm and courteous. The Emperor, without knowing Windthorst's opinion, called

<sup>\* &</sup>quot;The Nineteenth Century," September, 1889, p. 386.

<sup>†</sup> W. de la Rive: "Le Comte de Cavour. Récits et Souvenirs," Paris, 1862, p. 387.

Caprivi to fill the difficult position of Bismarck's successor, and thus has proved his capacity to place the right man in the right place. His later appointments of Herr Miquel as Finance Minister, of General Kaltenborn to the war office, of Herr von Heyden as Minister of Agriculture, and of Count Zedlitz as Minister of Public Instruction have been equally successful.

The task of the new government was a very difficult one. They had to work urgent reforms with the old body of clerks appointed by Bismarck and committed to his system, but in the main one may say that they have done fairly well. The government is getting on satisfactorily with the Reichstag, which was pronounced the worst possible, after the elections, by the National Liberals, who had been beaten. The violent scenes provoked by Prince Bismarck's personal attacks upon the opposition have ceased. General von Caprivi treats his opponents as gentlemen, and has declared that he will accept support from whatever quarter it comes. The Emperor himself, in a speech at Koenigsberg, acknowledged the business-like manner in which the opposition has treated important bills, and concluded with the memorable words:

"The King of Prussia stands so high above parties and their quarrels that he cares only for the welfare of every one of his subjects."

The internal reforms which have been carried are already of great importance. Herr Miquel has effected on a sound basis the reform of the income tax, which Bismarck had steadily opposed in the agrarian interest.\* Herr Herrfurth has successfully put his hand to the wheel for amending the antiquated law concerning the administration of rural communities. The law against Social Democracy has been tacitly abandoned and peace has not been disturbed; on the contrary, the much-feared demonstrations, which in Italy and France gave rise to great disorder, have passed quietly in the great German towns. The bill for the protection of labour, after a discussion of more than a year, has passed. It is certainly not perfect, but nevertheless will be a great advance; the protection of children's labour has been

\*The Upper House indeed rejected the tax of four per cent. on large incomes, but the House of Deputies, to which the bill was sent back, has adhered to the four per cent. and the Upper House has given way.

made more effective, and at the same time the fulfilment of the obligation to attend school has been secured. The law also prevents the misuse of children outside of factories in shops and domestic industry. For women the law provides that their work shall not exceed a maximum of eleven hours; and Sunday rest has been secured to the working classes, subject to certain necessary exceptions. Workingmen's unions are acknowledged as factors entitled to co-operate in fixing the relations between employers and workmen, factory laws, etc., the working classes obtaining thus a legal representative organ for the protection of their interests. The laws for public instruction have been amended in some points by a conference in which the Emperor himself took an active part, and a special law for regulating the elementary schools will be presented in the coming session.

All these reforms have met with considerable difficulties because the Conservatives are more or less opposed to them; they supported Prince Bismarck because they considered him as the best protector of their agrarian and industrial privileges, and the Emperor would not like to offend them too much. has, however, made one step which is most distasteful to that party and which is perhaps the most important reform—the treaty of commerce with Austria-Hungary, to be followed by similar ones with Switzerland, Italy, Servia, and other countries. Prince Bismarck, originally and still in 1875 a free trader, in 1878 turned protectionist, and thereby gave the impulse to the protectionist reaction which has prevailed in Europe during the last decade. He made a compact between the agrarians and the industrials, the latter agreeing to duties on foreign corn, which were successively raised from one to five marks, and also to duties on meat, timber, etc., while the agrarians consented to reintroduce duties on iron and to raise considerably those on manufactured goods. The consequence was the usual one of protectionisman artificial impulse given to industry by excluding foreign competition, and overproduction resulting from the increasing internal competition. The German workman had to pay more for his bread, meat, and all the necessaries of life than the English or Belgian, and if this led to a rise of wages he did not profit by it, while the manufacturer, with higher wages to pay and the enhanced price of raw materials, had more difficulty in competing in foreign markets. Consequently there has been a considerable falling off of German exports, and in order not to lose the foreign market the manufacturers have offered their goods at lower prices, retrieving themselves for the ensuing loss by organizing "rings" and thus enforcing proportionally higher prices at home.

It was evidently an inconsistent policy to subsidize railways and lines of transatlantic steamers and then by high duties to shut off Germany from the goods they brought. Life had become dear and the discontent prevailing in the masses was water on the mill of Social Democracy; numerous resolutions of Chambers of Commerce declared that the present system ought to be abandoned and that the proper way out was to return to treaties of commerce with a fixed tariff, which would give security to the export trade. It is due to the Emperor that a decisive step has been made in that direction by opening for this purpose negotiations with Austria-Hungary, which, after lasting five months, have now led to the conclusion of a treaty of commerce. Its contents are not yet known, as this treaty is to be followed by similar ones with the neighbouring states; but it is certain that, even if a complete rupture with the present system was not feasible, the tendency of these treaties will be to lower reciprocally the existing duties. It is a partial repudiation of Bismarck's commercial policy; it will not be free trade with the world, but it will give a freer intercourse between the states that will enter the new system. A great commercial union will be created, comprising the states of middle Europe—a fact the importance of which can scarcely be overrated, particularly as France is just now going to build up a wall of high tariffs between herself and other countries. Germany, Austria, Hungary, and their allied states answer by a commercial union "four square to all the winds that blow." They can compel Roumania, Servia, and Bulgaria to enter the league, for those states could not maintain their cattle and pig trade if they were shut out from the principal European markets, and this union must even reach to Russia, which cannot hope for the same favourable treatment if it maintains its prohibitive duties on the imports of its neighbours. Nay, such a bond would have more than merely commercial

consequences—it would baulk all hope of Russia's advance in the Balkan peninsula if the Balkan states are drawn into the circle of the union.

It was to be expected that this really great progress would not find favour with the agrarian party, as it embraces the lowering of the corn duties, by which the great landed proprietors have profited; and at the head of this opposition we find Prince Bismarck, who, in an article in the "Hamburger Nachrichten," evidently inspired by him, declared such concession to be "a tribute paid to Austria, sacrificing German interests." But if the ex-Chancellor, who now after a long struggle has been elected a member of the Reichstag, will in the coming session oppose the treaties of commerce, he will not be successful. It is certainly to be desired that a man of his importance should have a seat in Parliament, and much better that he should have occasion to speak his mind publicly than that he should exhale his wrath in anonymous newspaper articles and conversations with reporters. But he is very much mistaken if he expects to exercise great influence in the Reichstag. Just as Antæus derived his strength from contact with the earth, Bismarck was all-powerful only at the head of the enormous government apparatus which he had built up, and by which he defied his Sovereign as well as Parliament. But as a simple member he will be comparatively powerless; he will not be the leader of a compact party, for the Conservatives, although they gladly accept his support of the agrarian interest, will not dare to offend the Emperor by placing at their head a man who made the rupture with his Sovereign irreparable by his undignified, underhand attacks against the present government, which had the good tact to ignore them but has not forgotten them. On the other hand, although elected by the National Liberals, he cannot very well become a member of their party, as only a short time ago he declared himself to be a Conservative. He therefore will stand alone; his speeches will be listened to attentively, but they will be answered respectfully yet conclusively by the government and very broadly by Liberal speakers such as Richter, Bamberger, and Rickert, whom the Chancellor formerly treated with contempt or as enemies of the Empire. Besides, Bismarck is

no orator; his speeches are the product of much thought and full of incisive arguments as well as of sophistical casuistry, but they derived their real importance from the fact that they were uttered by the omnipotent minister. Bismarck's opposition, therefore, is not to be feared, and will only force the Government to take a more decisive position. The treaties of commerce will pass by an overwhelming majority.

Last but not least, we have to mention as one of the merits of the present government its resolution to do away with one of the darkest points of Bismarck's internal policy—the Guelph fund, an institution quite unique for the management of public opinion. Its story is briefly this: When the late King of Hanover left his capital during the war of 1866, he carried with him state bonds to the amount of 25,000,000 thalers. After the annexation, the Prussian government wished to recover this sum, and by the mediation of England an agreement was arrived at by which the King was to give up the 25 millions, Prussia paying him four per cent. interest on £2,400,000 as an indemnity for his former income from the Hanoverian domains, thus enabling him to keep up a royal household and style of living. But scarcely had King George fulfilled his part of the agreement by restoring the bonds, when Bismarck appeared in the Chamber declaring that the King was intriguing to bring about a war against Prussia, and that the government was therefore compelled to deprive him of the means for carrying out his plans by stopping the payment of the interest agreed upon. He added that it was necessary to place this sum at the disposal of the government in order to enable them to counteract these dangerous designs and "hunt those reptiles into their holes." A legislative assembly rarely resists if a successful minister declares that the country is exposed to imminent danger from abroad; it cannot test the validity of such statements when the minister asserts that it is essential to observe secrecy as to the special information on which his demands are founded. The House voted the bill as requested, and thus placed at the disposal of the government a sum of about 720,000 thalers a year as secret-service money, Article IV. of the bill expressly stipulating that the executive should not be obliged to render any account of the

manner in which it was spent. Now it may be perfectly true that at that time the ex-King was plotting against Prussia, and that the government was bound to oppose his schemes. But in any case this was only a passing danger, and the House ought to have limited its grant to a given time. It neglected to do so, and it has since bitterly repented of this omission. Nothing was heard of Guelph intrigues after 1869, yet that large sum remained at the unlimited disposal of the government, and it was a public secret that the money was spent for purposes very different from its original destination. But the Landtag could not repeal the bill without the consent of the government; and when a protest was addressed to it by some indignant member about the misuse of what was popularly called the "Reptile Fund," an under-secretary appeared at the bar, read out Article IV. of the act, according to which the government is not bound to give any account of the way in which the money is applied, and then, making his bow, retired as the three Anabaptists do in Meverbeer's "Prophet" after having had their say. In the sitting of the Reichstag of November 30, 1875, Prince Bismarck said:

"In the *régime* of our epoch I do not esteem anything higher than the most absolute publicity. Not a corner of political life should be allowed to remain in the shadow; everything should be lighted up."

He has taken good care that no ray of that light should ever penetrate into the darkness of the Guelph fund, for in truth it would have been impossible for him to govern without it. We now know that all the documents which could have furnished evidence to show for what purposes the money was spent have been carefully burnt at the end of every year, which sufficiently shows that all was not clean linen.

The most curious thing is that it was Prince Bismarck himself who again stirred up discussion on this very questionable point of his administration. This would be inconceivable but for the fact that personal rancour is one of the deepest traits of his character and that he never forgets a slight, evidently sharing the opinion of Madame St. Ange in Dumas's "Demi Monde": "A quoi servirait la memoire, si on oubliait les offenses." Bismarck held the opinion that Minister von Boetticher had contributed to

his fall, and in order to revenge himself he mentioned, in a conversation with one of his visitors, that that gentleman had received a large sum from the Guelph fund for the purpose of rescuing his father-in-law from bankruptcy. This piece of news naturally got into the press and caused a great sensation, but though it somewhat damaged Boetticher, who, however, declared that he had never known the source from which the money came, the Chancellor fell into the trap which he had laid for his reputed adversary. The alleged fact proving the misuse which had been made of the Guelph fund raised anew the public indignation against the whole institution, and the government wisely resolved to take the initiative of a reform by a speech of General von Caprivi in the Landtag on April 29th. We cannot say that it was perfectly satisfactory, as the Chancellor defended the indirect application of the fund for building churches, schools, etc., in Hanover in order to conciliate its population; such purposes were never contemplated when the law was enacted. But it may be acknowledged that he had to perform a knotty task in weakening as much as possible public criticism of an indefensible matter; the principal thing was his promise that henceforth the employment of these funds should be placed under the control of the Landtag, and thus a source of corruption and scandal will disappear.

It might indeed be wished that the government should show somewhat more decision than has been the case, for instance, in the reform of the sugar duties, which furnish a striking proof that Bismarck legislated in the mere class interests of great landed proprietors. The law of 1869 established a tax of 90 pfennigs per hundredweight on beet root, with an export bonus of 9 marks 40 pfennigs per hundredweight on raw sugar. This corresponded to the production of one hundredweight of sugar from 12½ hundredweight of beet root, and the government expressly declared that the bonus was on no account to involve an export premium; but new technical inventions made it possible to draw one hundredweight of sugar from 9½ and even from 8 hundredweight of beet root, so that the government got a tax of only 7 marks 80 pfennings instead of 10 marks per hundredweight of sugar. Besides, the factories succeeded in drawing a

considerable quantity of saccharine matter from the molasses which remained entirely untaxed. Yet the export bonus was maintained at its original height, and the consequence was that the revenue had declined in 1884 by 21 millions; while the sugar rcfiners, by inundating other countries, and particularly England, with cheap sugar, made enormous profits. Bismarck, however, for years opposed all reform of the tax, and when the government was at last obliged to acknowledge that a change had become in evitable, the law of July 9, 1887 introduced an impost upon the home consumption of 12 marks per 100 kilos, but the premium of 24 marks contained in the export bonus remained. The present government discerned that it was necessary to do away with the premium which, according to the original law of 1869, was clearly illegal, but it has accepted a transition, which leaves an open premium of 13 marks for three years and of one mark for the next two years, thus allowing the producers to continue filling their pockets for this period from the public exchequer, a concession which was certainly not called for, as we see from the last reports that a refinery declared a dividend of 100,672 marks for 1890-91 on a capital of 216,000 marks.

The reason of this compliance is probably to be found in the inclination of the Emperor not to touch too harshly the interest of the great proprietors of the eastern provinces. It is certainly true that this nobility has rendered important services to Prussia, in the Army as well as in the civil service; as a political party, however, it has never followed the principle "Noblesse oblige," but has strenuously insisted on its material privileges. It has opposed all the reforms of the great Elector, of Frederic William I., and of Stein and Hardenberg; it has availed itself of Frederic William IV.'s romantic predilection for creating an aristocracy by building up a House of Lords, which opposes all progress and could under William I. be brought only by strong pressure to submit to the equalization of the land tax. Its members became Bismarck's devoted followers because he secured the landed interest large profits by corn duties and premiums on sugar and brandy, and they are very unwilling to part with these privileges. The Emperor, however, will soon have presented to him the alternative of renouncing his excellent ideas of

reform for the benefit of the people at large or of doing away with those privileges which bar the way of reform, and the issue cannot be doubtful. He has made the first and decisive step by the Austrian treaty, and in his speech at Dusseldorf of May 4th he has declared that he will stand by it; the rest will follow.

#### TTT.

It remains to glance at the foreign policy of Germany during the last period. The Emperor has shown that he has none of the warlike propensities which have been fathered upon him. He guaranteed peace by ratifying in person at Vienna and Rome the engagements entered upon by his grandfather in the Triple Alliance, and these relations will certainly be strengthened by the commercial treaties. He paid a visit to England, by which all previous misunderstandings between the two countries were cleared away, and a cordiality was established which found its expression in the Queen's appointing him an Admiral of the British fleet. It might be said that he even went too far in this direction by the treaty of July 1, 1890, by which Germany acquired Heligoland but paid too high a price for it in Africa, abandoning Vitu to the English; but in any case, that treaty has clearly defined the spheres of influence of both countries in that quarter. The Emperor, further, has not been ashamed to abandon the untenable position into which Bismarck had brought Germany by his quarrel with Switzerland, and has reestablished the previous good relations between the two countries. He has been the first Prussian sovereign to pay a visit to the Sultan, at whose court he met with a brilliant reception, and by his courtesy he has greatly strengthened the German disinterested influence at Constantinople. He has profited by his personal relations of long standing with the Czar to convince him of his peaceful tendencies, and thus has successfully opposed the plans of a Franco-Russian alliance. He has also proved to France that all he wishes is the establishment of good relations between the two countries on the basis of the status quo; the French Ambassador at Berlin, M. Herbette, has been treated by him with marked distinction, and at the state dinner given to the

labour conference Jules Simon had his place at the side of the Emperor.

Perhaps William II. has gone too far in his attempts to conciliate France, as was proved by the visit of his mother to Paris. The Empress Frederic, who is building a castle at Kronenburg, near Frankfort, wished to go to Paris in order to obtain ideas for the decoration of her country residence. The Emperor did not quite approve of this journey, and only reluctantly consented to it, on condition that the stay at Paris should be a short one. The principal fault lies with Count Münster, who ought to have discouraged the journey. Moreover, it was badly managed; the journey was to be incognito, M. Herbette knew nothing of it, and the Empress travelled under the name of Countess X. However, the incognito was not kept up, and she was received on her arrival by the German embassy, at which, as well as at that of England, state dinners were given in her honour. She stayed too long, and her visit at Versailles, which Count Münster ought to have prevented, was imprudent. On the other hand, it is pretty certain that M. de Freycinet thought the opportunity favourable for touching the national fibre in order to get from the Chamber the large sums which he wants for military purposes, and for that purpose gave free play to Deroulède and his friends for their noisy declarations. It was President Carnot who prevented this incident's taking a serious turn by insisting upon a display of police force, strong enough to prevent any really insulting demonstration, which might have had disastrous consequences. The journey was a blunder because it was undertaken with the mistaken idea that the French are to be won by cajoling them, whereas they take such flatteries as a proof of fear. Napoleon I. knew them better when he said that they wanted to be ruled by an iron hand clothed in a glove of velvet.

This incident, however, belongs to the past, and will perhaps have had a sobering influence at Paris, for the best part of public opinion in France was ashamed that such men as Deroulède should attempt to speak in the name of the nation. Besides, it is said that when on that occasion the French Ambassador at St. Petersburg, M. de Laboulaye, sounded the Russian government

as to whether Russia would consider a conflict between France and Germany as a casus fæderis, he received so peremptory a refusal from the Czar that his government, which had been persuaded by him that an alliance between France and Russia existed in fact, even if it was not sealed by a treaty, will probably recall him from his post.

At all events, the Emperor William II. was justified in saying in his speech at Dusseldorf:

"I shall be glad, if by the assistance of Heaven, I shall be able to govern my country in peace. I only wish the European peace was lying in my hand; then I would take good care that it should never be disturbed. However that may be, I shall at all events leave nothing untried, and, as far as I am concerned, labour that it may not be disturbed."

These peaceful intentions, of course, do not exclude the necessity of being prepared for war. Russia and France are arming to an alarming degree, and German statesmen cannot be blind to the danger which this fact involves for their country.

William II. is undoubtedly the most remarkable sovereign of the present time. He is a modern man, notwithstanding certain proclivities which still adhere to him, like pieces of the shell of an egg from which the bird has issued. With restless activity he seizes upon all questions which agitate our time, be they large or small. To-day he speaks on great European affairs, opens new issues to German commerce, and proclaims social reforms; to-morrow he opens an art exhibition and takes a personal part in the performance of Wildenbruch's patriotic drama, "The New Lord." He presides over his Council and shows himself a ready debater, opens a scholastic conference, laying down his educational plans, and indefatigably travels over his country in order to see everything with his own eyes. Much in all this may be attributed to his active temper, but the moving principle is undoubtedly the high conception of his duty as "the first servant of the state." This conception is bound up with a strong consciousness of his eminent position; he feels himself to be the pillar of the state, called to carry out a great mission. As before the dismissal of Bismarck he said that he would crush any one trying to obstruct his path, so he declared in his late speech at Düsseldorf: "Only one is master in this country; I

shall suffer no other."\* It would be unjust to see in such unterances, caused by a high consciousness of his power, absolutes tendencies on the part of the Emperor. He is a constitutional prince and has rigidly respected parliamentary rights. But in a time when the principle of authority and order is undermined in many ways, the youthful Sovereign feels that he is the centre of monarchical discipline, without which the state can neither exist nor progress, and he is resolved to maintain his authority against Social Democrats as well as against interested conditions of privileged classes and persons.

As a mortal man, the Emperor is certainly not infallible; he speaks well and frequently, and his impulsive nature sometimes leads him to utterances which he would avoid if his speeches had been carefully prepared, and which afterward are officially corrected. Yet even this fault is not without its merits. The Emperor's speeches captivate by the rich knowledge they display, by the lofty conception of his taste they indicate, and by the deepness of thought underlying them. Above all, you feel that this monarchical orator truly means what he says; his whole heart is in his words. Whatever may be his partial shortcomings, no one can doubt that he is animated by the single idea of promoting the happiness of all his subjects and the greatness of United Germany.

Taking all in all, we may say that the Emperor's short reign has been successful, that it bodes well for the future, and that at present there is perhaps no life more precious for Germany, as well as for Europe, than that of William II.

# F. HEINRICH GEFFCKEN.

<sup>\*</sup>It is said that these words were suggested by the ill-advised desire of the great Rhenish industrials, embodied in a poem of Emil Ritterhaus, that the Emperor should effect a reconciliation with Bismarck and call the Chancellar back to his former position, a hint which was rather ungraciously received.

#### THE COLORED RACE IN THE UNITED STATES.

THERE are several things which unite to give a peculiar interest to the statistics of the colored race in the United States. In the first place, we are here dealing with an element of the population whose presence in the land is due entirely to force. All the other elements of our population represent migrations, early or late, which were voluntary, but the blacks were originally brought into this country through high-handed, brutal, often barbarously cruel violence. It would be no strained supposition that but for the slave trade as, with all its horrors, it was carried on between 1620 and 1808, there would not be 75,000 Africans in the United States, whereas now we have 7,500,000.

In addition to the fact just noted, viz., that but for the slave trade the blacks would not have been here at all, we have, in the second place, the fact that the domestic institution of slavery caused this element of our population to be distributed within the country, prior to 1861, very differently from what it would have been had the blacks been left free to place themselves according to their own tastes and industrial aptitudes. Wherever the master went within the territory where slavery was protected by law he carried the slave, without reference to the latter's predilections; and the natural range of residence for the master was much greater than the natural range of residence for the slave. The former represented a race bred in northern latitudes, and was hence thoroughly at home on the mountain side or table land; while yet, by the privilege of his strain, he could, without danger or great inconvenience, move southward if his interests The latter, on the other hand, represented a race bred under tropical conditions, and could move up the mountain side or go northward only at a large sacrifice of vitality and force.

But it was not merely the will or the interests of the master class which caused a far wider distribution of the colored element than would have taken place in a state of freedom. In his effort to escape from bondage, the black man made his way into regions whose climate and prevailing industries were, in almost the last degree, alien or hostile to him. Hence it came about that the close of the war found large bodies of this element of the population in positions which were highly abnormal.

In the third place, the abrupt conclusion of the slave trade in 1808 and the absence of any considerable immigration of colored people since that date, give a unique clearness and confidence to the statistical study of this element of our population. Substantially all of the 7,500,000 colored persons in the United States to-day are descended from the 700,000 women of this race found in the United States in 1810.

In the fourth place, while white blood has been, in some degree, mixed with colored, it has resulted, partly from the force of the old slave laws, by which the child followed the condition of the mother, and partly from the instinctive sentiments of the people, that all the descendants of those 700,000 colored women are still recognized and grouped together in the census. A man or a woman who is one quarter French or German, or even one half English, Irish, or Scotch, may not be known as such except by family friends; but a man or a woman who has a quarter, perhaps even only an eighth, of negro blood is still recognized as belonging to that race, and is so classed, not only in popular speech, but in the enumerations of the census.

The first census, in 1790, found the colored population of the country 757,208, constituting 19.3 per cent. of the total population. The census of 1810, two years after the abolition of the slave trade, found this element numbering 1,377,808, or 19 per cent. of the total population. Ever since the latter date the increase of the colored element has been less than that of the total population; and at each successive census the colored element has been found to constitute a smaller and still smaller share of the total population. In this last statement I assume a reasonable correction of the admitted defects of the census of 1870 in respect to the colored people of the South.

We do not yet know exactly what was the colored population of 1890 as found by the eleventh census. But the central office at Washington has, with truly remarkable promptitude,

given us the figures for all the late slave States and for the single free State of Kansas; communities which embraced fifteen sixteenths of this element of the population in 1880. So far, the rate of gain in the ten years intervening has been found to be 13.9 per cent., as against 24.86 per cent. for the entire population of the country. If we apply to the remainder of the colored population of 1880 the same ratio of increase which has been found to exist in that part which has been counted, we shall have the total for 1890 a little under seven and a half millions.

I have spoken of corrections to be made in the figures given for the colored population for 1870. The present census office has estimated the loss out of this element, at that time, to have been three quarters of a million. My own estimate has always placed that loss between three and four hundred thousand. Professor Newton, the eminent mathematician of Yale University, has recently computed it as about 550,000. Calling the loss 510,000, we should then have, in the following table, the statistical history of the colored race within the United States during the first hundred years of the nation's history:

	TABLE	I.—Colo	DRED	Popula	TION	OF	THE	UNITED	STATES.
57	Co	lored	Per	Cent. of			Inc	crease Per	Cent.

Years.	Colored	Per Cent. of	Increase Per Cent.			
I cars.	Population.	Population. Total Population. In 10 Years.		In 20 Years.	In 30 Years.	
1790, 1800, 1810, 1820, 1830, 1840,	757,208 1,002,037 1,377,808 1,771,656 2,328,642 2,873,648 3,638,808	19.3 18.9 19. 18.4 18.1 16.8 15.7	32.33 37.5 28.59 31.44 23.4 26.63	81.96 76.80 69.01 62.2 56.26	133.97 132.39 108.57 105.39	
1860, 1870, 1880, 1890,	4,441,830 5,391,000* 6,580,793 7,500,000*	14.1 13.8 13.1 11.9	22.07 21.37 22.07 13.9	54.57 48.15 48.15 39.12	90.74 87.59 80.25 68.85	

Thus while the total population of the country has, during the century, increased sixteenfold, the colored element has increased but tenfold. In 1790 that element constituted nearly one fifth of the population; in 1840, but one sixth; in 1860, but one seventh; in 1890, less than one eighth. The increase per cent.

<sup>\*</sup> Partly estimated.

within that element itself has tended to a decline since 1810, alike by ten-year periods and by twenty-year periods; while the decline has been continuous by thirty-year periods from the beginning.

These references to the past of the colored race in the United States have been made mainly with a view to clearing the ground for reasonable conjectures regarding its future. What can be said of this? In the first place, a glance at the foregoing table is sufficient to establish a strong probability that the movement there seen to have been so steadily in progress, during eighty years, toward reducing the relative importance of this element in the population of the country, will go on, at least through a considerable future, before it can be arrested; the strongest improbability that this movement will ever, in our future course as a nation, be reversed.

But is there anything to be said on this point beyond what appears on the first glance at our table? Here comes in the significance of one of the considerations adverted to in the opening of this article, viz., that the distribution of the colored people over our land, prior to the outbreak of the civil war, had been very different from what it would have been had only their own natural aptitudes and instincts been consulted in that matter. this be true, we should expect to find that, during the twentyfive or twenty-seven years since the blacks were left free to move within the country upon their own impulses, social, economical, and climatic forces have been operating to redress the disturbed balance. On this point the evidence of the tenth census could not be very conclusive, especially in view of the disputed count of 1870; but the testimony of the eleventh census, so far as it has yet been given, very clearly shows that a movement is in progress toward the abandonment by the blacks of the higher, colder, and drier lands to which they were carried by the will of the master class.

Unfortunately we have, as yet, only Kansas among the former free States, in the race tables thus far issued by the census office; and the experience of a single State in this respect cannot be held to go very far, especially as the numbers concerned are small. We shall, therefore, omit consideration of it.

In the following table we draw into two groups all the other States of which the race statistics are now attainable. embraces the middle-southern belt of the old slave States: States in which slavery was quite as much of a political and social as of an economic institution; States in which slaves were held, perhaps, even more from considerations of social dignity and importance or of personal convenience than from considerations of pecuniary gain. These States are Delaware, Maryland, Virginia, West Virginia, Kentucky, North Carolina, Tennessee, and Missouri. With them goes the District of Columbia. In most of these communities the colored element has traditionally been one quarter or less of the whole population, the exceptions being North Carolina, Virginia, and the District of Columbia, where, ten years ago, this element constituted a third or more of the total population. Only two, viz., North Carolina and Tennessee, are considerable cotton States; and in each of these the cultivation of that crop is confined to comparatively small sections. The constitution of the second group speaks for itself.

TABLE II.—COLORED POPULATION OF CERTAIN STATES.

State.	1880.	1890.	Per Cent. of Increase.
Delaware,	26,442	29,022	9.76
District of Columbia,	59,596	75,927	27.40
Kentucky,	271,451	272,981	0.56
Maryland,	210,230	218,004	3.70
Missouri,	145,350	154,131	6.04
North Carolina,	531,277	567,170	6.76
Tennessee,	403,151	434,300	7.73
Virginia,	631,616	640,867	1.46
West Virginia,	25,886	33,508	29.44
Alabama,	600,103	681,431	13.55
Arkansas,	210,666	311,227	47.73
Florida,	126,090	166,678	31.56
Georgia,	725,133	863,716	19.11
Louisiana,	483,655	562,893	16.38
Mississippi,	650,291	747,720	14.98
South Carolina,	604,332	692,503	14.59
Texas,	393,384	492,837	25.28

In the first group, West Virginia and the District of Columbia show a comparatively high rate of increase; but this concerns very small populations only. The remaining great masses of the colored people of 1880 in this group show gains far below the average of that element for the whole country. On the other hand, it is noticeable how closely, with the exception of Arkansas, Florida, and Texas (all which had in 1880, and indeed still have, large unoccupied areas), the cotton-planting States keep to that average. The great masses of colored population in Alabama, Georgia, Louisiana, Mississippi, and South Carolina have increased during the decade at between 13.55 and 19.11 per cent.

Taking the two groups as wholes, we find that the increase of the colored population during 1880-90 has been in the first but five and a half per cent., while in the second it approximated 19 per cent. Meanwhile the increase of white population in all

these States greatly outran that of the colored.

Not only has there thus been, as between the first and the second group of States under consideration, a decided tendency to a concentration of the colored element in the cotton-raising States on or near the Gulf, but in certain of the States of either group which have a wide range in altitude there has also been manifested a tendency, though naturally much less marked in force, toward the concentration of that element upon the lower lands. Thus in Georgia, which comprises a vast extent alike of typical "black-belt" cotton lands and of mountain lands suited to manufactures and mining, 48.43 per cent. of the colored population of 1880 lived less than five hundred feet above the sea. In 1890 the ratio had increased to 51.87. In Tennessee, which likewise has a wide range in altitude, the corresponding proportions have increased from 50.52 in 1880 to 52.40 in 1890.

What do such facts as have been adduced from the record of the past ten years indicate regarding the future of the colored race in the United States? I answer, they show that the anticipations which so many Americans have formed, with more or with less of satisfaction, regarding a large continuous increase of that element, up to some ultimate very high point, have little foundation in recent experience. The presiding officer of a Republican State convention two years ago sketched for his auditors a growth of the colored race in the United States, which was to bring them, at no distant future, to a total of fifty millions!

Of course, the extravagance of this computation was due in great part to the omissions (already referred to in this paper) from the colored census of 1870, which caused a very large apparent gain between that year and 1880. But the unreality of the estimate in question was also in part due to a failure to note the consideration which is intimated in the figures just presented, viz., that the natural field for the colored race is, not strictly, indeed, yet still virtually, circumscribed by climate and industrial conditions. Now, there is much reason to believe that a race that is limited in its range becomes, by that very fact, subject also to important restrictions upon its capabilities of sustained increase within that range. If the growth of the colored race is hereafter to take place mainly within the cotton belt, it is safe to say that it will never reach fifty millions, or a third of that number. I would not presume to say that the evidence which has been offered as to the tendency of the colored people toward concentration within the region referred to is conclusive; but I entertain a strong conviction that the further course of our population will exhibit that tendency in continually growing force; that this element will be more and more drained off from the higher and colder lands into the low, hot regions bordering the Gulf of Mexico.

That in these regions the negro finds his most favorable habitat and environment does not require physiological proof. He is here, in the highest sense, at home. The malarial diseases, so destructive to Europeans in this climate and on this soil, have little power over him. At the same time, the industrial raison d'être of the negro is here found at its maximum. In the northern States that raison d'être wholly disappears. There is nothing here, aside from a few kinds of personal service, which the negro can do, which the white man cannot do as well or perhaps bet-Even upon the high lands of the old slave States, in the upper parts of Alabama or Georgia, for instance, or in the mountain districts of Tennessee and North Carolina, there is little which the negro can do which the white man cannot do equally well. Nay, in the upland cultivation of the cotton crop, I entertain the conviction that the vigorous, resolute white element, free from the incubus of human slavery, will more and more assert itself, large plantations being subdivided into small cotton farms.

If the foregoing views are approximately correct, the relative decline of the colored population throughout the United States, except in the cotton belt, will be due partly to the more rapid growth of the white element; partly to migration southward from Virginia, Kentucky, Missouri, Tennessee, and North Carolina, under urgent calls for additional labor in the cotton fields, such as have been so clamorously made during the past few months; partly to the high rate of mortality prevailing among negroes in northern latitudes and even in southern cities.

To illustrate the last point I will take twenty-three counties in the South, containing cities and large towns and having an aggregate population, according to the tenth census, of nearly 600,000 whites and almost exactly as many negroes. In these counties, while the birth rates per 1,000 of living population were for the whites 28.71 and for the colored 35.08, the proportion of those born and dying in the census year, per 1,000 births, was for the whites 100.1 and for the colored 140.08. If, however, we look to the very large cities alone for the statistics of mortality, we find the disproportion between the death rate among the whites and the death rate among the colored much exaggerated, to the disadvantage of the latter. Thus in New Orleans, in the census year 1889-90, the deaths per 1,000 of the living population were for the whites 25.57 and for the blacks 36. In Baltimore the corresponding death rate was for the whites 22.63, for the colored 36.39. In St. Louis the death rate was for the whites 18.19, for the colored 33.78. In Washington (including in this term the whole of the District of Columbia) the corresponding rates were for the whites 19.84, for the colored 38.1. We have not as yet the statistics of mortality for Louisville, Richmond, and Charleston, but in 1880 the proportion of deaths among the two elements of population in these cities was as follows:

Cities.	Deaths per 1,000 of Living Population.		
	White.	Colored.	
Louisville, Richmond, Charleston,	711 10	34.76 31.97 45.	

It will be seen from the foregoing data that the colored population of the United States is at the present time maintaining its relatively slight rate of increase only by means of a very high birth rate, just a little in excess of a very high death rate. This is a very critical situation, since anything which may occur to reduce the birth rate will have no tendency whatever to reduce the death rate. Indeed, in the case of an untrained and illdeveloped race, any cause, whether the diminution of marriages or persistence in criminal practices, which diminishes the birth rate is more than likely to accelerate the death rate. Hence we may say that wherever the industrial raison d'être of the colored man, distinguished as an economic agent from the white, shall diminish in any part of the country, this is not unlikely to be followed by a decline in this element more rapid than would occur in the case of another element of the population which had been running along on a lower birth rate but with also a lower death rate.

FRANCIS A. WALKER.

## UNIVERSITY EXTENSION IN AMERICA.

THE first conscious attempts to introduce English University Extension methods into this country were made in 1887, by individuals connected with the Johns Hopkins University. The subject was first publicly presented to the American Library Association at their meeting upon one of the Thousand Islands in September, 1887.\* The idea was heartily approved by Dr. W. F. Poole, of Chicago, and other librarians. It was at once taken up in a practical way by Mr. J. N. Larned, Superintendent of the Buffalo Library, which, with its admirable class rooms, is one of the best equipped libraries in this country for popular educational work. Mr. Larned obtained the services of a Hopkins graduate-student, Dr. Edward W. Bemis, now professor of history and political economy in Vanderbilt University. Mr. Bemis spent twelve weeks in Buffalo in the winter of 1887-88. gave twelve lectures in one of the class rooms of the library upon "Economic Questions of the Day." His special subjects were: (1) "Causes of Discontent"; (2) "Socialism and Anarchy"; (3) "Henry George's Theory of Rent Taxation"; (4 and 5) "Monopolies"; (6) "Immigration"; (7) "Education"; (8) "Labor Legislation"; (9) "What Determines the Rate of Wages under Perfect Competition"; (10) "Labor Organizations"; (11) "Cooperation and Profit Sharing"; (12) "Taxation in the United States."

There was a printed syllabus, or subject analysis of each lecture, with suggestive references to books, magazine articles, labor reports, etc. All the library material recommended in the syllabus was brought together in a special room of the library, and there Dr. Bemis could be found for consultation at certain hours every working day for twelve weeks. He personified, for the time being, the economic section of the Buffalo Library. People

<sup>\*</sup>See articles on "Seminary Libraries and University Extension," in "Johns Hopkins University Studies," November, 1887.

came to him for further information upon topics connected with his lectures, and he gave them helpful suggestions as well as good things to read. His course of public instruction, instead of boring a long-suffering community twelve times for sixty minutes, surprisingly interested and instructed them throughout a period of three months. Good citizens began to study political economy. Representatives of capital and labor sat side by side in the class room and asked the lecturer hard questions. It is a very good test of a public speaker if he can hold popular attention upon a serious subject for one hour. Dr. Bemis not only held his audience during that time each week, but he interested his hearers so deeply that, out of an average attendance of 250, more than 200 usually stayed after the lecture for a second hour to hear the class discussion, in which each participant was limited to five minutes. The city papers gave good reports of both lectures and debates; thus the chief lessons of an interesting public course were carried into almost every household in Buffalo.

At the end of the course the Buffalo "Courier" said: "It is a remarkable testimonial to the lecturer's ability and fairness, that without any attempt at rhetorical effect he has been able for twelve weeks to hold together an interested audience of considerable proportions for the discussion of subjects which are usually considered insufferably repelling. One speaker expressed the opinion of many others of the audience last night, when he said that he thought they knew about twelve times as much regarding the subjects discussed as when they began." Mr. Larned in an article on "An Experiment in University Extension," said: \* "It was the peculiarity of the course that it brought together the most remarkably mixed company of people that we ever saw assembled in our city. The workingmen were fairly well represented, by the leaders of their organization more particularly; prominent business men and capitalists were usually present; professional men came in numbers; ladies were fully one half the audience. . . . The general result was to awaken in our city a degree of attention to these economic questions which they never received before."

It is important to observe that this lecture course was organ-\*"Library Journal," March-April, 1888. ized upon a business basis and more than paid expenses. It led moreover to the formation in Buffalo of a local branch of the American Economic Association, composed of earnest students of economic science. These are the facts regarding one of the first and certainly one of the most successful attempts to introduce University Extension methods into this country. The experiment indicates that public libraries, with convenient class rooms, good management, and good lecturers, may become very efficient means of public instruction. A town library should be the highest of high schools, and may become a local branch of the People's University.

The Buffalo Library experiment was repeated in the winter of 1888-89 by Mr. Edward C. Lunt, a graduate of Harvard University, who gave an excellent course upon "American Political History," with a printed syllabus of topics and good references for the study of each presidential administration. The same winter Dr. Bemis repeated his course on "Economic Questions of the Day" in Canton, Ohio, where he lectured two evenings in the week for a period of five weeks. The course was organized by the Rev. Howard MacQueary and was attended by business and professional men, together with a fair proportion of wage-earners. The Canton experiment, like that of Buffalo, resulted in the formation of a local branch of the American Economic Association. but the course was not a pronounced success, partly because it was not sufficiently advertised, and more especially because it was organized by one clergyman, without the co-operation of others. It is essential for the large success of University Extension in our American towns and cities that it should avoid even the appearance of sectarianism. While class courses can undoubtedly be sustained in connection with individual churches, it is difficult for any such form of public lectures to command the attention of a large community where there are different religious interests. A neutral basis, like a public library, town hall, high school, or local college, should always be sought for University Extension lectures.

The Canton experiment was followed in February, 1889, by another course, conducted by Dr. Bemis, in connection with the Public Library at St. Louis. Mr. F. M. Crunden, the librarian of

that institution, had become interested in the idea of University Extension at the meeting of the American Library Association in 1887. Encouraged by the success of the Buffalo course, he invited Dr. Bemis, who by that time had become a member of the faculty of Vanderbilt University, in Nashville, Tennessee, to make weekly trips to St. Louis, 318 miles each way, and give lectures on economic subjects in a pleasant room connected with the Public Library. Perhaps the most remarkable thing about this course was that it actually was given by Dr. Bemis under the long-range conditions above described. This was University Extension in grim earnest. Experience proved, however, not that Vanderbilt University was too far from St. Louis, but that the library class room of St. Louis was too far from the residence portion of the city to attract a large audience in the evening. A class of moderate size was organized; an excellent class list of works on social science and political economy was printed; and a local branch of the Economic Association was duly formed. Nevertheless the receipts from the St. Louis course did not suffice to pay expenses. It should, however, be observed that the higher education is rarely self-supporting. It requires either endowment or subsidies. In England it is not expected that local lectures can be supported merely by the sale of tickets. From one third to one half the necessary expenses are usually borne by capital and philanthropy. Popular educators should not be discouraged by lack of economic success. A class of seventyfive or one hundred earnest students is an educational triumph. University Extension aims at good classes, not at mass meetings.

About the time when these various experiments were being tried in St. Louis, Canton, and Buffalo, individual members of Johns Hopkins University were attempting to introduce University Extension methods in connection with local lectures in the city of Baltimore. The first practical beginning was made with a class of young people who met once in two weeks, throughout the winter of 1887–88, in the reading room of a beautiful modern church close by the Woman's College. After an introductory talk upon "University Extension" by a Hopkins instructor, the class was intrusted to a graduate student, Mr. Charles M. Andrews, now professor of history in Bryn Mawr

College, who gave a series of instructive lectures, accompanied by elass exercises, upon "The History of the Nineteenth Century," with Mackenzie for a textbook on that subject. A working library of standard authorities was collected by the joint efforts of the leader, the class, and the Rev. John F. Goucher, then pastor of the church. To the hearty and generous co-operation of this gentleman, now the president of the Woman's College of Baltimore, the success of this initial experiment, and indeed of several others, is chiefly due.

Following the young people's course, the like of which is entirely practicable in any church society with a college man for class leader, came a co-operative and peripatetic course of twelve lectures for workingmen on "The Progress of Labor," by twelve different men from the historical department of the Johns Hopkins University. These twelve apostles of extension methods swung around a circuit of three different industrial neighborhoods in Baltimore, each man repeating his own lecture to three different audiences. The subjects were as follows: (1) "The Educational Movement among Workingmen in England and America," by Dr. H. B. Adams, of Baltimore; (2) "What Workingmen in America Need," by C. M. Andrews, of Connecticut; (3) "Socialism, its Strength and Weakness," by E. P. Smith, of Massachusetts; (4) "Chinese Labor and Immigration," by F. W. Blackmar, of California; (5) "Labor in Japan," by T. K. Iyenaga; (6) "Slave Labor in Ancient Greece," by W. P. Trent, of Virginia; (7) "Labor, in the Middle Ages," by J. M. Vincent, of Ohio; (8) "Mediæval Guilds," by E. L. Stevenson, of Indiana; (9) "Labor and Manufactures in the United States One Hundred Years Ago," by Dr. J. F. Jameson, then of Baltimore; (10) "Industrial Progress in Modern Times," by H. B. Gardner, of Rhode Island; (11) "Industrial Education," by P. W. Ayres, of Illinois; (12) "Scientific Charity and Organized Self-help," by A. G. Warner, of Nebraska, then General Agent of the Charity Organization Society of Baltimore.

Every lecture was accompanied by a printed syllabus in the hands of the audience, and was followed by an oral examination and a class discussion. Every man lectured without other notes than those contained in his outline of topics. The courses were

organized upon a business basis and not upon the theory of giving something for nothing. This co-operative experiment in University Extension work was, however, only moderately successful. Probably it was more useful to the lecturers than to their hearers. It is the conviction of the writer that it is mistaken zeal for university men to attempt to lecture to workingmen as such, or indeed to any "class of people." University Extension should be for citizens without regard to their occupation.

The most successful educational experiments by Johns Hopkins men have been in connection with Teachers' Associations and Young Men's Christian Associations in Baltimore and Washington. Under such auspices co-operative and class courses in American history and economic and social science, with printed syllabuses, have been given before audiences varying from 150 to 1,000 appreciative hearers. Chautauqua circles in Baltimore have also been found intelligent and responsive to student lectures. Under the direction of Hopkins men a three years' graduate course of study in English history has been successfully carried on by more than one thousand students, who had already finished the four years of required study in the Chautauqua Literary and Scientific Circles. A very elaborate syllabus, based on Green's "History of England" and select volumes of the "Epoch Series," has been the means of guiding this interesting work now in progress in all parts of the country. In connection with the Chautauqua College of Liberal Arts more detailed courses in ancient and modern history have been conducted in the same way, with monthly written examinations, the papers being in most cases set and read by Hopkins graduates, working under direction after the manner of Professor W. R. Harper, of Yale University, president-elect of the new university at Chicago, who is the recognized leader in the recent higher educational work of Chautauqua.

The idea of University Extension in connection with Chautauqua was conceived by Dr. J. H. Vincent during a visit to England, in 1886, when he saw the English lecture system in practical operation and his own methods of encouraging home reading in growing favor with university men. The first definite American plan, showing at once the aims, methods, cost, and history, of

University Extension lectures, was drawn up at Chautauqua by the writer of this article in the early summer of 1888 and was printed in September of that year by the Chautauqua Press. Successive editions of the prospectus were issued in 1889 and 1890. They have proved of suggestive value in many parts of the country where students, returning from Chautauqua, have done local missionary work for the cause of University Extension. The plan has been tried in various places with fair success by a graduate of Yale, Mr. George E. Vincent, of Buffalo, and by a Hopkins man, Professor W. D. McClintock, now of Wells College; but experience has shown that the best opportunity for Chautauqua University Extension is at Chautauqua itself, in the summer season, and in the forty or more local assemblies, where thousands of people meet and where the adaptation of English methods will systematize American popular instruction and give it greater continuity. At the central Chautauqua, in the summers of 1889 and 1890, lecture courses were given upon the extension plan with syllabus, class discussions, and final written or oral examinations. The peculiar combination of college work and public lectures now in vogue at Chautauqua makes the adaptation of these devices an easy matter.

Contemporary with the development of Chautauqua College and University Extension was the plan of Mr. Seth T. Stewart, of Brooklyn, New York, for "University and School Extension." This movement was the natural outgrowth of the Brooklyn Teachers' Association under the progressive leadership of Mr. Stewart, himself a Yale man and a practical educator, whose enthusiasm and generous public spirit deserve hearty recognition. The first public announcement of his project was made November 20, 1888, and contemplated the formation of "a strong bond of sympathy between the public schools and the universities." The main idea was the promotion of courses of reading at home and in social circles along special lines, under the direction of competent professors—a manifest improvement upon earlier Chautauqua methods. First rate men were secured at Harvard, Yale, Princeton, and Columbia, who prepared very suggestive syllabuses for the guidance of teachers and students in English and other literatures, history, and natural science. Many classes

were formed and over one thousand teachers in Brooklyn and New York pursued definite courses of study under good guidance in 1889–90. No mention of University Extension lectures was made in the first circular. Indeed, that feature has but recently been developed in New York and Brooklyn (1891), although it was first proposed in the second circular, issued January 1, 1889, and was doubtless contemplated from the outset. It was stated in 1889 that University and School Extension was "primarily intended for teachers in the public schools," but it was believed that others might pursue the studies proposed. This expectation has been realized, and the Brooklyn idea is now attracting wide attention in New York and elsewhere.

Several public meetings were held in New York in 1889–90 for the promotion of University and School Extension. After-dinner addresses were made by President Eliot on "The Universities and the Schools—What Each Can Do for the Other;" by Dr. W. T. Harris, Commissioner of Education, on "What Universities Can Do for the People;" by President Patton, on "Post-Graduate Study." These gentlemen and Presidents Dwight and Low, together with Mr. Chauncey M. Depew, Dr. R. S. Storrs, and other distinguished gentlemen, have sanctioned the Brooklyn and New York movement by their presence at these meetings or by allowing their names to appear in the printed circulars of "University and School Extension."

The most recent phase of this movement was the beginning in March, 1891, of "spring courses" of lectures in New York City. Well-known professors from Princeton, Columbia, Harvard, Yale, and the College of the City of New York gave short courses of five lectures in such attractive centers as the Metropolitan Museum of Art, Cooper Union, Columbia College, and the Pratt Institute in Brooklyn, upon such subjects as art and archæology, astronomy, English and German literature, philology, philosophy, and psychology. Syllabuses were used, but the various other features of extension work—written exercises, discussions, and final examinations—do not appear to have been systematically carried out.

Columbia College naturally proved the most attractive centre for University Extension. The lectures on English and German literature, astronomy, and psychology were perhaps best received. There appeared, however, to be difficulty on the part of some lecturers, in presenting their subjects with sufficient elearness and vivacity for a popular audience. This practical defect will doubtless be discovered elsewhere in this country when university men take the lecturer's platform.

One of the most gratifying recent experiments in University Extension in America has been in the city of Philadelphia under the auspices of the American Society for the Extension of University Teaching. At various local centres Mr. Richard G. Moulton, one of the most experienced lecturers from Cambridge, England, lectured for ten weeks in the winter and spring of 1891 to large and enthusiastic audiences. All the essential features of English University Extension were methodically and persistently carried out. Individual or partial attempts had previously been made here and there in the United States, but Philadelphia deserves the credit of really establishing University Extension in a thorough and systematic way, which promises to be of practical service to the whole country. One of the most remarkable phases of University Extension there was the interest taken by intelligent workingmen in a lecture course on higher mathematics given by Professor Crawley, of the University of Pennsylvania. A petition for such a course was signed by thirty-five machinists, draughtsmen, architects' assistants, and other skilled workers; and the course was actually given, with an average audience of seventy-five attentive hearers. A full account of University Extension in Philadelphia, with a great variety of short essays upon interesting phases of the subject, has lately been published in "The Book News" (Philadelphia, May, 1891).

The American field for University Extension is too vast for the missionary labors of any one society or organization. Our Eastern universities and the State institutions of the West and South, as well as the agricultural colleges throughout the country, have fields all their own, which no association of middle men can work half so well. These fields are white to the harvest, but the laborers are few. It is not the duty of regular professors to go upon long missionary journeys for University Extension. Occasionally perhaps they can give an introductory lecture, or help organize a public course near home, but they are not the men for circuit-riding. Their work lies under their very hands. If professors have any leisure, they can employ it more profitably in original investigation or in literary labors. A regular staff of University Extension lecturers should be trained at our best universities, from their own graduate students. These academic fledglings should be taught to fly around the home nest before they attempt distant flights. This is the method of Baltimore, Oxford, and Cambridge. While it is recognized in England that almost anything will pass at college, no young lecturer is allowed to experiment upon an English public until he and his syllabus have been approved by critical academic authorities.

The most significant sign of the times with regard to University Extension in America is the recent appropriation of the sum of \$10,000 for this very object by the New York legislature. The money is to be expended under the direction of the Regents of the University of the State of New York. This supervisory body, dating from 1784, embraces all other universities, colleges, and incorporated institutions of academic and higher education within the State, together with the State Library and the State Museum at Albany and such other libraries and museums as may be recognized by the University. The Regents, of whom George William Curtis is the chancellor, are a kind of ministry of public instruction for the whole State. They now have full power to co-operate with localities, organizations, and associations, within State limits, for the purpose of extending to the people at large, adults as well as youth, opportunities and facilities for higher education. No part of the appropriation can be expended in paying for the services of local lecturers. The economic principle of all University Extension is to throw the burden of expense upon the localities benefited. A local course of twelve lectures ought not to cost more than \$350. The intention of the New York act is simply to provide the necessary means for organizing a State system of University Extension, to suggest proper methods of work, to secure suitable lecturers, to conduct examinations, to grant certificates, and to render such general assistance and co-operation as localities may require.

The machinery for the conduct of local examinations already

exists in the State of New York, as it did in England before University Extension was inaugurated. By the act of June 15, 1889, the Regents have full power to establish higher examinations and to confer diplomas of any kind which they may deem proper. They can mark out courses of study and establish requirements for degrees of every sort. They can examine into the conditions and operations of every corporate educational institution in the State, including colleges and universities like Vassar, Cornell, and Columbia. They already disburse annually to local academies over one hundred thousand dollars from existing funds. There is nowhere else in this country an educational body with such comprehensive powers as are now legally vested in the Regents of the University of the State of New York. Through their existing connections with academies, colleges, libraries, and museums, they can utilize some of the best educational machinery in the State for the promotion of University Extension.

A committee representing the New York colleges and universities, appointed by Chancellor Curtis, reported February 9, 1891, in favor of "the establishment and supervision of a State system of university extension, including not only lectures, but such conferences, examinations, and certificates for work done as experience may have proved to be desirable and practicable." This committee, consisting of its chairman, President C. K. Adams, of Cornell, and Presidents Low, of Columbia, Taylor, of Vassar, Hill, of Rochester, and Webster, of Union, further recommended, in order to maintain high university standards, that "the regents work through the representatives of the universities and colleges of the State as a committee having charge of the details of instruction and examination." The University Extension Committee, acting upon this suggestion but without abdicating general control, proposed to the Board of Regents the annual appointment of a University Extension Council, composed of five or more representatives of the colleges and universities in the State, such appointment to be made at University Convocation by the Chancellor, from nominations by the University Extension Committee. The proposed University Extension Council is to advise and co-operate with this committee of the Regents and

to make to them an annual report upon the subject of University Extension. This entire plan was adopted by the Board of Regents February 11, 1891, and their request for \$10,000 for prosecuting the work was granted by the New York legislature, April 16, 1891. The bill has been approved by the Governor.

It now remains for the Regents to appoint a competent University Extension secretary to organize local lecture courses in connection with colleges, universities, libraries, museums, associations, and localities throughout the State. The greatest practical difficulty will be to secure the right sort of men for extension lecturers. The success of the whole experiment will depend upon those who undertake it. "One of the first necessities," says Mr. J. N. Larned, of the Buffalo Library, "is the training of a supply of competent and enthusiastic young lecturers, who will take the field on small pay, for the sake of the introduction it will give them. The difficulty now is to find such."

While the colleges and universities of the country must supply educated men for this service, there ought to be established a State seminary for the practical training and preliminary testing of public instructors. Such a training school might be easily and inexpensively maintained at Albany, where the resources of the State Library would afford admirable opportunities for original research and for the quiet preparation of lecture courses by would-be educators. The best vantage ground, however, for actual experiment would undoubtedly be found in New York City, in connection with Columbia College, museums, missions, college settlements, Cooper Union, the College for the Training of Teachers, and "School and University Extension." The Pratt Institute and the Brooklyn Institute are also centres for good work.

The Secretary of the Regents, Mr. Melvil Dewey, from whose Albany address in July, 1889, on "The Extension of the University of the State of New York," this recent State movement has proceeded, early recognized the possibilities of Chautauqua and other summer assemblies as outposts for practical observation and good training. The State and city of New York are full of good agencies for the promotion of University Extension, and they need only to be utilized. Local colleges, academies, institutes, and museums are all at hand. General conventions of

Young Men's and Young Women's Christian Associations have declared their approval of the new project of the Regents. University Extension will, moreover, provide an outlet for college graduates and at the same time recruit the supply of students.

Mr. Chauncey M. Depew, one of the Regents of the University of the State of New York, in a letter to Mr. Sexton, chairman of the committee on University Extension, of which Mr. Depew is also a member, said, April 13, 1891: "I have made considerble study of the subject, and believe that when the experiment is once made, its benefits will be so great and immediately evident that the institution will become a part of our educational system." George William Curtis, Chancellor of the Regents and a member of the same committee with Mr. Depew, said of University Extension: "The development of this movement and its extraordinary success are the most significant facts in the modern history of education."

The movement originated in the year 1867 in academic lectures to the school teachers and workingmen of the North of England by Professor James Stuart of Cambridge, now member of Parliament. The admirable system of popular instruction which he devised (circuit lectures, with syllabus, class, written exercises, and final examination) was sanctioned by the University of Cambridge in 1873. Oxford followed in 1878. London Society for the Extension of University Teaching dates from 1876 and is under a joint board of control representing the two great universities and the most important higher educational institutions of the metropolis. By these three principal agencies University Extension has been carried through all England. The Scotch universities, the colleges of Ireland and Wales, and even the distant universities of Australia have followed the good example set by Cambridge. In 1889-90 nearly 400 courses of local lectures were given under the auspices of the Oxford, Cambridge, and London organizations. No less than 41,000 English men and women outside the colleges and universities were reached last year by these extension courses.

So remarkable are the facts concerning the local demand by the English people for higher education that the present seems to be the dawn of a new era. The Reformation introduced a more

popular spirit into religion. The great revolutions in Holland, England, America, and France opened the way for the democratic spirit in politics. And now science and culture are beginning to recognize the demands of the living age. Lord Bacon long ago said that wisdom for man's self is in many branches thereof a depraved thing, but it has taken centuries for cultivated Englishmen to learn this fact with regard to university education. It is only within a generation that dissenters have had full academic rights at Cambridge and Oxford. The spirit of the Reformation and of modern revolutions must triumph in education as well as in religion and government. New England and America set an example to all the world in the state support of public schools. Old England has led the way to the higher education of adult citizens, men and women, but Americans have already advanced one step further than has the mother country, for New York has provided for a State system of University Extension. She must work out the experiment with great caution and not cripple in any way the spirit of local self-help. Not a dollar should be granted to localities or institutions to enable them to enjoy academic lectures. General supervision and encouragement of local efforts should be the function of the university in New York and in every other State. If the universities will not cooperate, let the people help themselves by an appeal to local talent, or to the nearest college, or to the legislature. Communities desiring local lectures should put themselves into communication with their State university or with the most important educational institution in their vicinage.

The conditions of permanent success for University Extension in this country are so different from those in England that we must look forward to the establishment of a greater number of illuminating centres. The State universities of Michigan, Wisconsin, and Minnesota are already in organic relations with popular educational institutions throughout wide areas and have only to utilize existing connections for the successful promotion of University Extension in the great North-west. Into this vast field will soon enter the new University of Chicago with its elaborate federal system and avowed sympathy with the cause.

### OPERATION OF THE INTERSTATE COMMERCE LAW.

On April 5, 1887, an act of Congress became effective, bearing the comprehensive title of "An Act to Regulate Commerce." It was an entirely new departure in federal legislation. Its authority rests upon a constitutional provision which confers upon Congress power "to regulate commerce... among the several States," the extent and limitations of which have never been judicially determined.

The railroads of the United States are creatures of State legislation. There has been no governmental supervision of railway construction. New lines have everywhere been authorized with the utmost freedom by the various States and Territories, and leases, purchases and consolidations have been easily arranged in which State lines have been altogether disregarded. The railroad system has been a most potent agency for the practical unification of our country by quietly obliterating territorial divisions, while threading the land with a network of iron rails along which interstate commerce moves without rest.

The course pursued in establishing this modern transportation facility has been so hasty and inconsiderate that the fundamental relation of the Nation to the several railroad corporations is to this day unsettled. From the outset the public has confided implicitly in what it has been pleased to call the "principle of free competition." While railway charters have usually contained a clause authorizing each company to fix its rates and fares, it was always practicable to provide a competing line when rates were thought unjust. Competing lines have been multiplied and expanded, until their very number is now the source of the most serious practical difficulties connected with our domestic commerce.

This universal reliance upon competition as the safeguard of the public has had two noticeable results: first, it has tended to entrench railroad managers in the belief that the public was protected sufficiently thereby, and that carriers by rail, like carriers by sea, were entitled to fix rates at will, subject only to the control of competitive conditions. This view was supported by the fact that in the charters no supervisory control over railway rates was reserved; and the doctrine that a charter is a contract, the obligation of which the legislatures are forbidden to impair, has been relied upon as definitely committing the rate-making power to the corporations themselves. This construction was first shaken by the decision of the Supreme Court in 1876, in what have since been known as the "Granger cases," wherein a general supervisory power over the charges of common carriers was asserted as existing in the State legislatures at common law, superior to charter clauses. This decision was not unanimous, and the reasoning presented was not so convincing as to command universal acceptance. It was at once challenged by the corporations, and has been from time to time attacked in the same tribunal; it has not yet been withdrawn but it has been materially modified, notably in a case from Minnesota decided in 1890, when it was established that there is a limit beyond which the State cannot go in reducing railway rates, which limit would be passed in case a State should attempt to deprive a corporation of its property without due process of law, by fixing rates too low to permit of a fair remuneration for its use. A large debatable ground yet remains open, with a possibility that the position of the railway in federal jurisprudence may eventually be radically modified.

In the second place, in its practical working, competition bred discrimination. The evils of unjust discrimination in railway methods cannot be too vividly portrayed. As time went on they became more and more pronounced, until they were too great to be endured. Legislative investigations were demanded. Laws forbidding partiality were enacted here and there, experimental and often inefficient, but usually based upon an English statute passed in 1854, when Parliament had the sagacity to take this evil by the throat in its youth and strangle it. Finally Congress took the matter up. Its action was from time to time postponed, upon the idea that the States which had created the railroads should be left to deal with them; until Congress and the country

in 1886 were surprised by a decision of the Supreme Court in the case of the Wabash Railway Company vs. the State of Illinois, which declared that a State law against discrimination had no validity in respect to interstate shipments, even though Congress had wholly refrained from action upon the subject. Upon the heels of this decision the report of the Select Committee on Interstate Commerce came up for consideration in the Senate.

This report summed up the necessity for federal legislation in a series of "Complaints against the railroad system of the United States," eighteen in number, all of which were merely specifications under one general charge—discrimination. The bill recommended to the Senate might properly have been named An Act to Prevent Railway Discrimination. Its machinery and details were all directed to the accomplishment of that result.

Yet in admitting the wrong and approving the application of a proper remedy, it is only just to remember that the evil was not altogether or chiefly the fault of railway managers. On the contrary it was perceived by them more clearly and deprecated by them more seriously than by any other class of the community. It was the natural and logical outgrowth of the unforeseen and extraordinary violence of railway competition. In order to secure traffic a railway official felt called upon to underbid his rival. He gave the shipper a private rate, a rebate, a free pass anything in the shape of a concession or a favor. The land was honeycombed with special arrangements of innumerable forms, all secret, because otherwise they would have been useless, and all forced upon the carriers by the exigencies of unbridled competition. Many shippers became wealthy from such gains. Others were envious of like success. At last the public sense of justice demanded a reform.

The remedy proposed was the forbidding of unjust discrimination under pains and penalties. That was the essence of the Interstate Commerce law. In other words, the result was prohibited while the cause was left in full operation. It was thought that free and unrestricted competition must be maintained as an essential principle of the American railway system. The symptoms of a disease had been submitted to diagnosis and a treatment for the malady was prescribed, while its cause was

allowed to remain in full force. It was not perceived that competition might be regulated in its excesses without by any means effacing it altogether. Legislation assumed the singular attitude of demanding that the most extreme competition be preserved, while prohibiting it to be carried on in the most direct and efficient way.

It should be said that the committee of the Senate which originated the law was not altogether responsible for the adoption of this illogical position. The law as at first passed in the Senate imposed upon interstate carriers the three obligations of just and reasonable rates, the avoidance of all unjust discrimination, and the cessation of undue preferences or advantages. principal agency provided for their enforcement was publicity; tariffs were required to be published and filed as a public record, and thereupon to be maintained without deviation; a Commission was erected to assist in the enforcement of these provisions; full statistics were demanded. In this form intelligent railway managers, who had followed the course of the investigation and the framing of the law with great interest, were quite generally willing to accept the supervision of a national authority in lieu of the conflicting and at times impracticable attempts at State regulation which had previously embarrassed them; and the proposed legislation was welcomed as affording some promise of escape from the meshes of the unfortunate system of discriminations in which unwillingly they had become involved.

During the closing weeks of the Forty-ninth Congress the Senate bill was considered by the House of Representatives, where it fell into the hands of legislators who were desirous of imposing more inflexible rules. They insisted upon giving it a greater severity of form, and at the same time adopting features which were designed to make the amelioration of competition impossible; in other words, they proposed to stamp out the disease by force, but at the same time to stimulate the miasm which was its cause. An amended bill was passed in the House which radically changed the proposed enactment; a Committee of Conference followed; and in the closing days of the session an agreement was patched up to which the Senate finally assented, although many senators who had supported the original measure

recorded their votes against it. In this way the Act to Regulate Commerce was passed, the two principal features grafted on the measure by the action of the House being the short-haul clause and the anti-pooling clause, with other changes in the direction

of greater stringency.

Upon its publication railway managers were startled, and some of them were disposed to active opposition. The general sentiment among them, however, was that there was much of good in the new law, particularly in its anti-discrimination features, and that it should be given a fair trial in the belief that time would bring such corrections as might be found necessary. Arrangements were, therefore, made for the printing and filing of tariffs, and rate sheets were overhauled for the purpose of eliminating so far as possible such unjust discrimination as was apparent upon their face. Of course discriminations in railway rates are necessary; for example, the rate upon silk and upon sand should not be the same, and the question is often a doubtful one whether a particular discrimination is or is not unjust. termination of this question, arising in innumerable forms, is the matter which has chiefly occupied the attention of the Commission since the passage of the law.

The furnishing of statistics was also accepted by the roads as a proper and perhaps a useful requirement, and has been developed into a thorough and complete series of returns in which all railway companies now participate, not only those which cross State boundaries but also those located within single States which are engaged through their connections in interstate traffic. This feature of the law is in a fair way eventually to bring about a universal assimilation of statistical returns throughout the country, which when accomplished will be of almost incalculable value to the public as well as to the roads themselves.

Reviewing its effect upon railway rates, the operation of the law is seen to have intensified former conditions. Since the conclusion of the civil war the tendency of railway rates in the United States has been uniformly downward, under the pressure of competitive conditions whose force cannot be appreciated by persons outside the circle of traffic officers who directly feel their constant burden. In 1865 the rate per ton per mile was from three to

four times greater than in 1885. When the act in question took effect, railway rates in the United States, especially the long-distance freight rates on which interstate traffic is moved, had reached a plane so low as to be the wonder of the world. It was recognized at that time that except in isolated cases the rates were generally low enough; and the Senate committee were careful to explain that the need of the public was not so much lower rates as non-discriminating and non-fluctuating rates. The public is vitally interested to have the carriers earn enough to enable them to operate their property efficiently, with safety to persons and property, and to insure a reasonable compensation for the employment of the necessary capital.

The forces which drove rates downward during the twenty years previous to the enactment of the statute have since continued in play, and other potent influences in the same direction have been added by the law. For example, the short-haul rule involved large immediate reductions, and continues to impose the requirement that rates at intermediate points shall be shrunk whenever competition forces lower rates at more distant points on the same line. Again, it was formerly customary to restrict competitive concessions to a narrow circle of patrons whose interests were more directly involved, or whose traffic was important and valuable, while now any rate made to one must be published as an open rate to all, and cannot be restored without giving ten days' public notice. The changes in the classification of freight which have been made necessary in order to comply with the provisions of the law have also reduced freight charges materially.

In the Appendix to the Fourth Annual Report of the Interstate Commerce Commission will be found an elaborate report, prepared by the Auditor of the Commission, Mr. C. C. McCain, in which a careful comparison is instituted between the classifications and rates in force previous to the passage of the law and those now in use; details are exhaustively stated concerning every section of the country, and also in respect to nearly all the more important articles of traffic, extending even to the local rates of a large number of typical roads. The facts given are startling and will well repay examination. They are confirmed

by the reports of the decreasing rate per ton per mile found in the statistical tables. They are summed up in the following concluding paragraph: "What has here been given will show conclusively that the tendency of freight rates throughout the country is downward, and that this tendency is largely due to the Act to Regulate Commerce."

Whether this result is or is not of ultimate advantage to the public may be open to question. It is undeniable that a point must at some time be reached where further rate reductions will seriously inconvenience the public by becoming the occasion of unwise and perhaps fatal reductions of expenditures in railway maintenance and service, as well as the cause of bankruptcies and the commercial disasters which follow in their train. The obvious requirement in this regard is some provision for the alleviation of exaggerated and unhealthy competition.

This condition of affairs, though worthy of very serious consideration, is nevertheless an indirect result. "The underlying purpose and aim of the measure," said the Senate Committee, "is the prevention of discriminations, both by declaring them unlawful and adding to the remedies now available for securing redress and enforcing punishment, and also by enforcing the greatest practicable degree of publicity as to the rates, financial operations, and methods of management of the carriers." It becomes, therefore, important to inquire to what extent the operation of the law has proved its usefulness in the accomplishment of this its main object, the prevention of unjust discrimination.

Speaking broadly, the history of discriminations since the passage of the law may be summed up as exhibiting a series of yearly waves, sometimes general throughout the land and sometimes more closely localized, but always distinctly marked and easily acounted for. When the law first went into operation it was felt that a new era had arrived. The statute demanded the undeviating and inflexible maintenance of the published tariff rates. Rebates, drawbacks and all "other devices" whereby a carrier should receive from one person "greater or less compensation for any service rendered" than from another for a like service, were expressly declared unlawful and were punishable by a heavy fine. This was just what conservative and influ-

ential railway managers desired. It was not only just, but it protected their revenues. The new rule was cheerfully accepted and imperative orders were issued for its obedience. But toward the close of 1887 it began to be perceived that there were difficulties, which became much more serious in 1888. On even rates the traffic naturally flowed to the direct lines, which could give the best service and make the best time. Roads less direct or of less capacity, roads with higher grades or less advantageous terminals and roads otherwise at a disadvantage, found that business was leaving them. It was discovered that the law in this its most essential feature, as well as in other respects, was practically a direct interference by the government in favor of the strong roads and against the weak. Dissatisfaction arose among officials of roads whose earnings were reduced and which were often near the edge of insolvency. It had been customary for them to obtain business by rebates and other like devices, and they knew no other method. It presently became to some of them a case of desperation. There was nothing in the law specifically forbidding the payment of "commissions," and it was found that the routing of business might be secured to a given line by a slight expenditure of that nature to a shipper's friend. Other kindred devices were suggested, some new, some old; the payment of rent, clerk hire, dock charges, elevator fees, drayage, the allowance of exaggerated claims, free transportation within some single State—a hundred ingenious forms of evading the plain requirements of the law—were said to be in use. demoralization was not by any means confined to the minor roads; shippers were ready to give information to other lines concerning concessions which were offered them, and to state the sum required to control their patronage. A freight agent thus appealed to at first perhaps might let the business go, but when the matter became more serious and he saw one large shipper after another seeking a less desirable route, he was very apt to throw up his hands and fall in with the procession.

Meanwhile nothing was done in the way of the enforcement of the law. It was found that the sixth or administrative section had been so framed as to require the exact maintenance of the tariffs of each carrier, but that this important provision had been omitted respecting "joint tariffs," in which two or more carriers participate; rates upon interstate traffic are usually joint. Moreover, the methods pursued were kept secret and were exceedingly difficult of proof. Traffic managers were naturally unwilling to make complaints or to furnish proof against each other, and often their houses were of glass. Shippers were very prompt to see the situation and to strike for every advantage which they could obtain, playing one road against another, often misrepresenting the facts as to what other lines would do, and always receiving the benefit of the violation of the law in cash or its equivalent.

Toward the end of the second year came a reaching out for a remedy. In the closing days of the Fiftieth Congress amendments to the law were adopted by which shippers as well as carriers were made subject to its penalties, and the punishment of imprisonment was added to the fine in cases of unjust discrimination; joint tariffs were also distinctly brought within the jurisdiction of the Commission and the courts.

These amendments became effective March 2, 1889, and their influence was immediately felt. While traffic officers had been willing to take the risk of a fine, believing that their corporation would stand behind them, the possible imprisonment was purely personal and alarming; shippers of integrity refused knowingly to become law breakers; the Commission felt its hands strengthened by the new provisions which for the first time placed interstate tariffs fully under the law; and the roads combined in agreements intended to assist in the suppression of unjust discrimination. The third year therefore exhibited an almost entire cessation of the use of illegitimate methods for securing business, and until near its close little complaint was heard. The fourth year, 1890, witnessed a renewed relaxation of the spirit of obedience. The conditions that had prevailed in 1888 again became pressing, and evasions secretly inaugurated were not efficiently dealt with; for a considerable time no prosecutions were commenced; customers began to renew their appeals for favors, or as they term it, for relief; and it was presently a common statement among shippers and traffic agents that the law was after all a dead letter, and that its penalties need not be feared. A short corn

crop added its pressure by threatening a deficiency in the usual tonnage; and at the end of last year, although irregularities were more carefully concealed, they were generally believed to exist to a considerable extent. During the year three or four indictments against railway traffic agents were found by grand juries in different parts of the country, two or three shippers were also indicted for fraudulent practices; and one railway officer had been brought to trial, convicted and fined. A new obstacle, however, had been developed in the way of enforcing the penal provisions of the law; shippers and railway officials refused to testify before grand juries, upon the ground that by so doing they would incriminate themselves or the companies of whose books and vouchers they were the fiduciary custodians. The point was held by the local courts not to be well taken, but it is pending for review in the Supreme Court of the United States. This contention, if sustained, should not necessarily block prosecutions under the law, except in cases where evidence of the offense is impossible to be obtained otherwise than from the guilty parties; a condition which exists concerning other penal statutes.

With the commencement of the present year, 1891, a determined effort has been made, in which most of the lines west of Chicago and the Mississippi River are participating, to put down by concerted action the cutting of rates. The association has shown strength, and at the present writing there are no intimations that these provisions of the law are not obeyed by the lines referred to. It is only fair to add that in the Southern States there has been less complaint that the sections of the law which forbid unjust discriminations between shippers and which require the maintenance of tariff rates have not been obeyed. The difficulty in our Eastern, Central and Western States arises from the multiplicity of lines, many of which would find themselves impoverished by that strict maintenance of rates which is by far the most important requirement of the public in respect to transportation by rail.

The operation of the law in this respect leads directly to the question of the railway pool. How shall each existing company be assured a fair share of such business as is common to all?

It is demonstrable that participation in common or competitive business is essential to the existence of the several roads. The public expects such participation, otherwise the construction of the various lines was unjustifiable. But this participation is obstructed by the Act to Regulate Commerce, which makes illegal the offering of special pecuniary inducements in order to attract traffic to lines in any respect inferior to the best. In its present form the act might well be entitled An Act to Promote Railway Bankruptcies and Consolidations by Driving Weak Roads out of Competitive Business.

It seems to have been the idea of legislators that lines which found it necessary to do so might reduce their tariff rates. This would be useless, for at once a similar reduction would be made by all. The spirit of competition is as violent in the management of strong roads as of weak ones, and an attempt upon the part of inferior lines to employ tariff reductions as a means for obtaining traffic would ruin them in short order. Rare occasions have arisen in which stronger lines by agreement have consented to the establishment of a lower scale of rates upon competing roads less favorably situated. The most noticeable example of this is found among the trunk lines, where the Pennsylvania, the New York Central and the Baltimore & Ohio permit the Erie, the Lehigh Valley, the West Shore, the Lackawanna, the New York, Ontario & Western, the Chesapeake & Ohio and the Central Vermont to "enjoy" a lower scale of tariff rates than themselves on west-bound business from the Atlantic seaboard to Chicago; and where the latter roads in turn are conceded tariffs increasingly below the standard rates of the stronger lines, according to their respective degrees of disability in the competitive struggle. This arrangement is favorable to the public in that it gives shippers the option of a slightly lower rate for a little longer time or less adequate service, with the privilege of having the best by paying a trifle more for it. It operates in practice to effect a distribution of the traffic, somewhat roughly, giving rise to frequent dissensions and bickerings over the "differentials" which are allowed; but after all it has enabled the trunk lines usually to secure a better maintenance of tariff rates and a better observance of the provisions of the law against private rebates and discriminations than has been attainable in other sections of the country where different conditions make such an arrangement impracticable. It vividly illustrates, however, the necessity of some plan by which common business may be divided, and the fact that the working of such an agreement is directly and positively in support of the fundamental object proposed by the framers of the Interstate Commerce law. The new agreement among the Western roads alluded to above, is based upon an apportionment of the business in competition, which it is expected may in some way be attained, and without which an agreement in aid of the provisions of the law against discriminative practices would be comparatively useless.

The railway pool as it formerly existed, which is forbidden by the Act to Regulate Commerce, had primarily this for its object. It was an arrangement by which, at stated periods, the common business of competing lines was aggregated and apportioned upon agreed percentages, the lines in excess paying over to the lines in deficit such sums as were required to produce the necessary equalization among the shares of traffic assigned to the several roads. This custom has almost universally prevailed in other countries where a national or otherwise concentrated railway ownership has not supervened. The English law against unjust discrimination has been constantly supported by a system of railway pools, without which it is safe to say that the suppression of discriminations would have been impossible. Our federal statute, however, contained a clause of special severity against the pooling of freight; a fine of five thousand dollars was provided, and it was enacted that each day of the continuance of the agreement should be deemed a separate offense. Pools, therefore, were abandoned in 1887. It may be stated without fear of contradiction that if the carriers had been left free to make arrangements among themselves upon which each line might rely for eventually receiving in some form a fair share of competitive traffic, the temptation for secret rate cutting would have been in great measure removed, and the country would have been spared most of the traffic disturbances and illegitimate contrivances for buying business which have since been periodically rife.

A thorough system of pools would not by any means eliminate competition. It would to some extent ameliorate it, and the amelioration, or more properly the regulation of unhealthy competition, is absolutely necessary for the preservation of the American system of independent railways. But there would still remain a thousand matters in respect to which competition would remain free to expend its force, not the least being the constant struggle for a revision of the pool percentages, which impels every line to do its best.

It must be frankly conceded that there were evils connected with the pooling system as it formerly existed. At times pool agreements may have been used to obtain excessive rates; although, as has been shown, the general tendency of rates was rapidly downward. It was possible for an adjustment of percentages to be established so widely out of line as to result in the imposition of too heavy a burden upon some strong road, at the ultimate expense of its patrons; but statistics show that the payments in the long run were generally equalized in substantial accordance with the reasonable current of traffic, and that the balances transferred had no appreciable effect upon the rates charged. It was a fact that the existence of the system at times stimulated unnecessary and uncalled-for railway construction, but that is a matter which the State should have controlled in its own The employment of the pooling system had not prevented the existence of discriminations, but it had held them down, to a marked degree, wherever it was introduced. It is not claimed that the practice was wholly free from objections, or that it had been able unaided to cure every evil; but it was the best plan known and the only plan known to accomplish the objects aimed at-objects of supreme importance to the public and the carriers alike. Instead of controlling its possible tendencies to harm, which might readily have been done by its legalization under proper regulation as to reasonable rates, etc., the mistake was made of destroying the system altogether, and providing no substitute. The best judicial authorities now hold that agreements in partial restraint of competition are not necessarily against public policy, nor void under the common law unless they are intended or have the effect to produce excessive exactions; that when they are designed and employed to protect against ruinous competition they are commendable and should be supported by the courts. The object of the pooling system was to assist the roads in maintaining just and stable rates, and in exterminating unjust discrimination. It should have been seized upon by Congress and made use of as an aid to the enforcement of the law. It would have been a most powerful auxiliary to that end.

Since 1872, railway carriers have been casting about to discover some means by which they could conform to the requirements of the law, requirements which they concede are chiefly just and proper, without the assistance of the pooling system. They have now reached the point where it has become clear that their efforts will altogether fail unless some form of division of business can be arrived at. This is as yet in an experimental stage. It is believed not to contravene the fifth section of the statute. However this may be finally decided, the time has come when it is clear that there is nothing else left to be done; and if the point is raised its decision will be left to the courts, together with the broader question of the constitutionality of a statute which undertakes to select this single class of beneficial contracts for adverse legislation.

The fourth, or "short-haul" section of the law has received perhaps an exaggerated importance in the public mind by reason of the fact that while the preceding sections denounce unreasonable rates, unjust discrimination and undue preferences and advantages in general terms, this section purports to state a concrete rule, of easy apprehension. It was seized upon by the press as the leading feature of the law, and its results have been kept prominently in view. In fact, however, this provision was merely the statement of what should be prima facie evidence of an undue preference or advantage, in a single aspect of that hydra-headed evil. Although it overturned customs, rate sheets and classifications of long standing in every part of the land, and involved an immense loss of revenue upon short-distance traffic, it was quite generally submitted to by the roads. Probably eighty per cent. of the instances in which a greater charge had previously been made upon a shorter than upon a longer haul on the same line of transportation were at once eliminated from the tariffs, usually by reducing the rate formerly charged for the shorter distance.

There were many cases, however, in which the application of the rule was felt by carriers to be a grievous burden, and some in which it appeared that it would imply serious financial disaster. It was soon perceived that the section did not contain, as was at first supposed, a hard and fast rule, but that its application was limited by the words "under substantially similar circumstances and conditions." The construction of that phrase became the pivot about which discussion turned. The result reached was in accord with the construction previously given to similar language, and the "conditions" in respect to which similarity should exist were taken to include the competition of other carriers, chiefly those not subject to the law.

The country is full of cases which when analyzed show that there is no actual injustice in the apparent preference. This was fully recognized by the Commission, which ruled that under this clause of the law dissimilar circumstances and conditions entitling a carrier by rail to make a lesser charge for the longer than for the shorter haul might be made out in cases of actual competition with carriers by water not subject to the law, with foreign or purely State railroads not subject to the law, and also in rare and peculiar cases of competition with other railroads which are subject to the law where the general rule would be destructive of legitimate competition. Without further elaborating the cases thus distinguished, it may be said that the conclusion thus reached was generally accepted by the roads, and that the section as thus construed has been quite uniformly obeyed, not only in the preparation of standard tariffs, but also during rate wars.

The most important effect of this provision upon the roads has been the loss which it has entailed in continuing competition for through business over routes longer than the most direct line to a given terminal. Many well-established routes of traffic are quite circuitous, and some that are in active use are nearly twice as long as the short line. Business for local points upon

routes of this character would naturally be carried upon tariffs graded increasingly with the distance; but when a point is reached where the rate is as high as the rate by the short line to the distant terminal, the law forbids any further advance, and the road was given the alternative of reducing its intermediate rates or retiring from the competitive business. This condition is found in every part of the country; and the value of participation in the through business usually has been felt to require the acceptance of the sacrifice demanded by the law at local stations. The statute, in this respect also, favors the direct lines against those which have a greater mileage, by making it much more expensive for the latter to continue to compete with the former.

The operation of this rule has been in some respects a surprise to the public. It has removed from many jobbing centres important advantages which they previously had, and has enabled interior communities, formerly of little apparent consequence, to deal directly with distant markets. Interior manufacturing points have also felt its blight. In other words, it has worked to the advantage of the great points of importation, production and distribution, and to the disadvantage of the minor cities and towns which had formerly been known as jobbing points or trade centres within the various States in the interior of the country. This tendency soon became so marked that the jobbers in some of the States labored for, and in some instances were able to obtain, State legislation which was designed, and which had the effect, to partially nullify the principles of the Interstate Commerce law.

This suggestion leads to a remark without which any consideration of this subject would be incomplete, namely, that the interstate commerce of the country cannot be efficiently and satisfactorily regulated until the entire internal commerce, that within as well as that which crosses State boundary lines, is made subject to the same laws and is controlled by the same rules. The Commission has clearly pointed out how close and interdependent are the relations between State and interstate transportation, and how the exercise of State authority in the regulation of State traffic by rail must necessarily embarrass the

regulation of interstate traffic by Congress. It would be easy to multiply examples of this, drawn not only from considerations like those presented above, but also from the actual interdependency of State and interstate rates.

The possible effect of the law upon traffic in goods imported from or exported to foreign countries, in its relation to purely domestic commerce, presents another important subject. Recent rulings of the Commission, as yet but little understood, will lead to great changes in existing trade relations if carried to their logical results. If the interpretation given by the Commission to the law in its present form is correct, and the statute makes illegal all through rates to and from foreign countries which are not made by adding to the ocean rate the local rate of each line to or from its seaboard terminal, the Interior and Western States will probably refuse to permit it to continue long without material modification.

It will be perceived that the foregoing review of the operation of the Interstate Commerce law has been written by a believer in its fundamental principles and in the propriety of federal legislation upon this subject. Changes in Congressional enactments are exceedingly difficult. The consideration of important commercial legislation is too often evaded upon purely political considerations, or pushed aside in favor of private or local matters. Sufficient time has elapsed to bring out the more obvious imperfections of the law, which has now been thoroughly tested, and has profoundly affected railway management in every part of the country. Among its indirect results may be noted a hesitation to engage in important railway construction, and an increased tendency toward the consolidation of lines and the unification of interests, arising largely from the severity of its pressure upon the weaker roads. Unregulated competition is essentially self-destructive.

ALDACE F. WALKER.

## ARE OUR IMMIGRANTS TO BLAME?

THE immense increase, during the last two decades, of the number of immigrants arriving in the United States—the number being twice as large in the last ten years as in the decade from 1870 to 1880—has deservedly attracted the public atten-Fears of its consequences are expressed by men animated with a desire to promote the public welfare and to prevent dangers to the future security and permanency of our institutions. The national legislature has appointed committees to investigate the subject and has proposed measures that may prevent, or at least mitigate, the evils arising from this source. The competition and the struggle of life, selfishness, and patriotism have increased the cry for protection against the evil of immigration and the demand for more or less stringent restrictions against it. The question is of so much importance, that every proposition or measure affecting it should be carefully weighed and examined to ascertain whether the evils complained of are really the results of our large immigration or can be attributed to other causes than those lying at the surface; or at least whether they are not aggravated by circumstances entirely independent of the size and character of the immigration. In short, it is to be carefully considered whether the remedies recommended may not increase the evil instead of mitigating it, and may not be worse than the disease to be cured by their application.

Men are always ready to shift to the shoulders of others the responsibility for the misfortunes which are the results of their own follies, and the American people may be only too willing to listen to appeals for the enactment of restrictive laws, especially if they appear clothed in the garb of patriotic phrases, although it may not be difficult to prove that they emanate from race prejudice, shortsightedness, and selfishness, or that their source is, to put it mildly, rather Chauvinism than patriotism.

The importance which immigration has played in the devel-

opment of the United States can hardly be overlooked even by the most superficial observer. Considering only the size of our population, if the increase of it had been dependent entirely upon the natural increa e—that is, on the surplus of births over deaths -the population at present would be hardly more than one-third of what it is. The increase of the population of France was only one half of one per cent. during the six years preceding 1890. In Germany it was 1.006 per cent. The average increase in all the European states from 1820 to 1880 was one per cent. If the same progress had been made in the United States from the year 1790, when it showed a population of 3,929,214, it would be today only 14.734,551. Even taking into account the addition of Louisiana Territory, Florida, and Texas, and assuming the most favorable conditions for the increase of our numbers, the population to-day, on a very liberal estimate, could not without immigration exceed 25,000,000. From all indications the prospects for the future are worse yet, and the publications of the tabular statements about the population from the census taken last year, may disclose facts that will alarm intelligent and patriotic citizens. Even taking into consideration the marvellous energy of the American people, their gigantic enterprise, their inventive genius and their eminent faculty for utilizing and applying inventions, their astonishing talent of organization, the tenacity and perseverance with which they fight against seemingly insurmountable obstacles; with all these and other valuable gifts, which are justly considered the most prominent characteristics of the native citizens of the United States, it would have been a physical impossibility for them, unaided, to have controlled and subdued nearly the whole North American continent, to have built 170,000 miles of railroads, to have opened and improved enormous water-ways, and to have populated 1,500,000 square miles of territory, all within a single century. All that we see to-day in the American people-their wealth, their immense achievements, their industrial enterprises—could certainly not have been accomplished to such an extent without the constant inflow of immigrants.

But all the advantages above indicated—even if they were greater than they are and could be attributed to a greater extent to the assistance of immigration than the facts justify—

would have been too dearly bought, if it could be proved that immigration has tended to deteriorate the national character of the people of the United States, and consequently endangers the future and the permanency of our free institutions. On the first view it would appear to be dangerous to introduce annually into the body politic a large foreign element; and without the mysterious and phenomenal power of assimilation possessed by the people of the United States, there is no doubt that this constant and great inflow of foreigners would already have swamped and annihilated the most valuable features of the American character.

I have a very lively remembrance of the impressions I received on the occasion of my arrival in the United States about forty years ago. I had become an ardent admirer of American institutions, from what I had learned of them in my college studies. The ship that brought me over was scarcely fastened at the dock before I ran up the nearest street, and, standing in Broadway near the Astor House, observed the passers-by. From their appearance they were mostly men who worked for a living, but nearly every one of them bore himself as if he was a sovereign. The expression of their eyes seemed to say, "I am second to none; there is nothing so great and so high that I cannot accomplish it, and I intend to fight my way." Not speaking English, I saw that it would be impossible for me to obtain a situation where I could utilize the knowledge acquired during my university studies; and having no means to speak of, I took a few days later a position as common laborer in a factory, although I had never done a stroke of manual work in my life before. After a few hours my fingers were full of blisters, and in a few hours more the blood was running down my hands; but I had been inspired with the energy that I saw in the eyes of those men on my arrival, and I continued, not disheartened by pains or difficulties in my work. I had received the baptism of the real American spirit, and I was never so proud of anything as of the blisters on my hands in consequence of my labor.

I mention these facts to show in a concrete case the really incomprehensible power and influence of the American atmosphere in the assimilation of foreign elements. It may have taken a little more time for others to have experienced the same effects,

but the result was the same with all, unless they were depraved and became the victims of vice and dissipation. That the admiration and loyalty of these adopted citizens ci the United States were something more than mere words was proved during the civil war, when they answered the call for the preservation of the Union as willingly as the native-born citizens, and sacrificed their lives for their adopted country. It is impossible to ascertain the exact proportion of adopted citizens that served in the Union army, but it can certainly be asserted that they were inspired with as much patriotism as the native-born Americans and fought as gallantly for the preservation of the Union as their comrades who had been to the manner born. Even the State of Wisconsin, more than one-half of whose inhabitants are foreign-born citizens, and which General Grosvenor called a European province, furnished as many regiments to the Union army, in proportion to its population, as any other State.

But, nevertheless, it cannot be denied that symptoms are appearing in our public and private life of a decay in the character of our people. The only question is: Are they the results of the influence of immigrants, or of other causes which corrupt the native-born citizen as well as the immigrant? The tendency toward the centralization of wealth and power is the most characteristic symptom that has appeared in the development of our public and economic life during the last thirty years. It has undermined the self-reliance of our citizens and induced them to look to the government as a paternal power for help and assistance. It has induced them to engage in a vile chase for success, irrespective of principle and virtue. It has beguiled them into aping foreign customs and habits. It has made them forget that American citizenship is the highest type and has caused them so far to lose their self-respect that they importune our ministers in Europe for introductions at court, and consider it their greatest ambition to splurge in all sorts of extravagances. This degeneration certainly cannot be traced to the influence of immigration. A dozen titled adventurers coming over here from Europe, who are introduced into the best circles, who turn the heads of the belles of society and who induce our "dudes" to imitate their snobbish follies, contribute more to corrupt the

habits and customs of the best classes of our people, who consider themselves pre-eminently American, than a million of poor immigrants. One of the saddest results of these changes in the habits and character of our people is their disinclination to have large and numerous families, which they consider rather a burden than a blessing. It is certainly a mistake to believe that the reluctance of our native population to bring forth sons and daughters is due to the fear that they would have to compete in the market for labor with hordes of immigrants, whose customs are repulsive to them and who are lowering the standard of living. The standard of living of all classes of our population is higher and better to-day than forty years ago, when of the abovementioned reluctance very little was known; and it is to-day especially noticed among the wealthier classes who never dream that they or their children will have ever to compete with foreigners in the market for labor. The opinion of Napoleon I., who, when asked by Madame de Staël which woman he considered the most meritorious, answered, "the one who has the most children," will find little favor among a large class of American ladies of our day, and some of them may pronounce it decidedly un-American. In glancing over this state of affairs, it is difficult to suppress the suspicion that "something is rotten in the state of Denmark." The roots of these evils are partially to be found in the events of our history, but they certainly have been magnified and multiplied during the last thirty years, and may, if not retarded by the greatest exertions of all well-meaning and patriotic citizens, assume proportions which may in the course of time threaten the stability and permanency of our republic.

To fight, to retard, and to extinguish this pernicious tendency should be the greatest duty and the highest ambition of all thinking men. Our statesmen and legislators, men of letters and journalists, ministers and professors in colleges—in short, all who by talents and position are able to influence public opinion and national character—should consider as addressed to them the warning: "Videant consules ne detrimentum capiat res publica."

It may be said that the above picture is the product of a mind inclined to pessimism, and that the colors of it are taken mostly from life as it appears in the city of New York. If all

this is admitted, it does not detract materially from the correctness and truth of the picture. The inhabitants of New York are no better and no worse than those of other places in the United States. I believe that there are numerous cities in our country which show the same symptoms of decay as those indicated in the above lines. From recent disclosures it appears that one city, which prides itself upon being the most ardent advocate and promoter of some of the views and measures that have contributed materially to the present deplorable state of affairs in our public and private life, excels New York in the hunt for accumulating wealth irrespective of the means employed.

Though these influences may be, here or there, retarded or accelerated by favorable or unfavorable circumstances, by the necessities of nature the same causes will, in a longer or a shorter period, produce the same results. Though we may think that the evils complained of are only symptoms of a disease that has taken possession of our political body, that the character of a nation is not changed by an intercourse of two or three generations, that at present the views and characteristics of former times fight against the extension and progress of the disease, it must be confessed that the impartial observer cannot contemplate without fear and solicitude the future destiny of our nation, and that if the tendencies of the present time should continue unchecked in the future, the fall of the great Western Republic must be admitted to be not only one of the possibilities but one of the probabilities of a future century. The historian of that time, in tracing the course of that most disastrous event to human civilization, will find no difficulty in detecting the sources from which it came; but one thing is certain—immigration will not be one of them.

Whatever we may think of the correctness of the foregoing assertions, at least it seems certain that immigration did not or does not lead to the deterioration of the American national character, and that if symptoms of such a deplorable change appear, they must be traced to other causes. Yet it cannot be denied that a certain class of immigrants, or certain classes of immigrants—for example, those that came during the past year in great numbers from Russia and from Italy—especially if they congre-

gate in single localities, cause inconveniences and may entail great burdens on the communities in which they settle in large numbers. It may be considered the duty of our legislators to prepare and to enact measures by the execution of which these evils, although they may be only temporary, can be mitigated and avoided altogether.

We may omit the consideration of the proposition sometimes made, to extend the time of probation which must pass before immigrants can become citizens of the United States, as not pertaining to the subject under discussion; for such a measure would not diminish or restrict immigration, while it would curtail the power of assimilation. The number of citizens coming here without the intention of making America their home, but only for the purpose of earning more or less money and then returning to their native countries, would be immensely increased thereby; in fact, all emigrants soon would be drawn into that category. The difficulties justly or unjustly complained of as the results of large immigration would therefore not be diminished but increased by an extension of the time necessary for naturalization. Other measures that have been urged with more or less energy and discussed in the public press as well as in meetings and legislative bodies are as follows. It has been proposed:

First, To authorize and instruct our consuls in Europe to provide every emigrant with a certificate, in which it would appear that he is unobjectionable and a desirable addition to the population of the United States.

Second, To provide for an educational test; that is, to require that every emigrant over a certain age, who lands here, shall be able to read and to write.

As to the proposition to provide consular certificates, this would be impracticable. Our consuls in Europe, being unable personally to investigate the circumstances of every applicant, would have to rely, in the main, on the testimony of the civil and municipal officers in whose territory the intended emigrant lived. If he were an objectionable person, had come in conflict with the laws of his country, and had been punished heretofore, his home authorities, in order to get rid of him, would recommend him to the United States consul with the greatest pleasure as a worthy

applicant for the dignity of United States citizenship; on the other hand, if he were really a valuable citizen, they would perhaps decline, in order to detain him, to furnish him with the certificate asked for. It is a known fact that in several parts of Europe organizations exist whose members and officers belong to the highest civil authorities (even some relatives of the reigning dynasties are honorary members of such organizations), whose special object it is to induce good-for-nothing fellows, who are burdens to their communities and even occupants of prisons, to emigrate to America, promising them pardon for their offences and the means to enable them to carry out their good resolutions. The United States consuls could be easily deceived by the home authorities, and, as they would be unable to carry on investigations themselves, the consular certificates would be entirely valueless.

But our consuls in the principal ports in which emigrants take their passage for the United States could do a great deal to ascertain their character and their past history, if they were instructed and enabled to engage persons whose duty it should be to find out from the emigrants, by intermingling with them before their departure, what their past history was and what the reasons were which induced them to leave their homes. Emigrants usually arrive in the port from which they start, a day or two before the steamers sail, and they are lodged in cheap hotels or boarding houses; most of them are usually very communicative and it would not be very difficult for a few detectives within an hour or two to learn the history and antecedents of nearly all the passengers. If undesirable or objectionable persons should be found among them, the consul could advise the immigration authorities in the United States in time to prevent their landing.

As to the second proposition—the adoption of an educational test—its efficiency is very doubtful. It might prevent from landing, some men whose education has been neglected but who possess, nevertheless, a great deal of common sense, industry, and energy, and who might become valuable citizens of the United States. No sensible man will deny or underestimate the value of knowledge and education, but they do not form the only criterion to judge the worth of a man. Culture of the heart is of

as much importance in the formation of the character of a man as culture of the head. I do not believe in an aristocracy either of birth or of intelligence; virtue and patriotism are not privileges belonging exclusively or even pre-eminently to wealth or learning. Scoundrels possess usually a fair education, as far as it can be acquired in school or from books, and an educational test in its practical workings may not prove to be what is expected by its advocates.

In my opinion, the present laws, amended and improved as experience may make it appear advisable, if they are rigidly, conscientiously, and impartially enforced, are sufficient to prevent, if not all, at least most of the evils that are complained of. Immigrants either physically or mentally defective, such as cripples or idiots, are easily ascertained among arrivals and can be prevented from landing. It would be more difficult to detect criminally-disposed persons, but with some diligence and care this can be accomplished. The largest number of undesirable arrivals are the so-called "assisted emigrants" who, either by means furnished by the municipal authorities of their homes or by societies organized for that purpose, are sent to the United Sates. These could and should be prohibited from landing. If the steamship companies had to take them back they would be more careful, and would instruct their agents not to sell tickets to persons whose landing in the United States might be prohibited. great deal then would remain to be done to imbue the immigrant with the American spirit, and it should be the ambition of all our citizens to contribute, to the extent of their ability, in one or another way to that end. It is a difficult work, but a great deal can be accomplished. Of course this cannot be done by resolutions, adopted by fashionable clubs, denouncing the immigrant in general and recommending the adoption of restrictive measures of doubtful expediency; it must be done by practical missionary work, by mingling personally with the immigrants and inducing them not to congregate in large cities but to disperse as much as possible in the country. They may not listen to such advice; if so, let them starve. Hunger is not only the best cook but often the best school-master too.

OSWALD OTTENDORFER.

## THE UNITED STATES AND SILVER.

It is not proposed to discuss in this article the merits either of the double or of the single standard of money. Much can be, and has been, said of both, but, if it be of any importance, it may be proper to say that the author thereof is, on the whole, of the opinion that it would be better for the people of the world if the double standard were now universally in use. The present financial condition of Europe is such that in all probability it will soon be determined whether the single gold standard, which is now practically the standard of the world including the United States, will be continued, or whether it will be succeeded by the double standard. Should the present crisis be passed successfully, there will be small prospect of any change by the nations of Europe for a long time. If, on the other hand, bi-metallism be adopted by them, then all occasion for discussion of this question as affecting this country will cease for the present. But, if bi-metallism be not adopted, what will our condition be? question involves other questions:

First:—If the world should become convinced that soon all of the money in use in this country would be silver and paper convertible only into silver, would or would not the immediate effect of that world-belief be harmful to us?

Second:—The transition having taken place, the money of the country having become silver alone, would the country be better off, would it have greater prosperity as a whole than it would have should the present condition continue—that condition involving the free interchangeability of gold and silver and the constant creation by government of as much silver money as will be kept equal in value to gold money by the use which the people of the United States make of it in their business?

Third:—Can and will the people of this country so use silver as money in their domestic business that, without reference to what the rest of the world may do, the price of silver the world over will so rise that silver shall bear the same ratio in value to gold that, by the laws of the United States, the silver in a silver dollar bears to the gold in a gold dollar? And will the same cause maintain that price steadily and at all times?

These questions include all that it is needful for a citizen of this country to consider, and he must consider them much as they are stated above to qualify himself to pass upon the wisdom of past, present, or proposed silver legislation. Apparently only pure, hard, business propositions are involved, which it ought to be possible to take up without feeling or prejudice and with entire indifference to the answers which facts and logic may compel the investigator to give. A country the majority of whose citizens cannot take up and dispose of such questions in this spirit is indeed already in a bad way, and never far from financial breakers; therefore, any one who proposes to consider this subject at all, and who cares for the good name of his country, should in advance determine that he will keep his mind free from prejudice and unreasoning passion and allow the truth to lead him where it will. If our people will not do this they must expect to be served only by demagogic time servers-old Poloniuses, who are willing to see either camel, weasel, or whale in any cloud, provided they thereby can get a temporary advantage. Almost any one who will take the trouble to learn facts is competent to answer the above questions, and it is my part in this short article to give what help I may to those who are trying to do this.

If the world should come to believe that silver is to be our sole money this would be because it also believed that the answer to my third question is a negative; for if we could put and keep the silver of the world on a par with gold, gold would freely circulate in this country just as it does now, and it would always be unimportant to both citizens and strangers which of our various kinds of money they might have. But the world has already answered my third question in the negative, for all Europe has stopped the free coinage of silver, which it would not have done had it believed that it, in conjunction with us, could maintain the old ratio of the precious metals. The countries of the Latin Union have a vast amount of silver, and it is

much more important to them to maintain the equality of silver with gold than it is to us even yet, and still they will not try to do so even with our help; how much less must they believe in our power to do this unaided! Therefore, upon thinking that they saw the approach of silver mono-metallism in this country, they would also think that our gold coins were better property than our silver coins, and would take steps at once to get our gold and to save themselves from the possibility of getting our silver. They would do this by selling all the securities created in this country for which they could find a market. They would seek that market here, and the result would be that, for a time at least, this country would have the use of much less foreign capital than it has now. I say "all of the securities created in this country," because I think that distrust would be cast not only upon our securities payable in lawful money but also upon those payable in gold, for the ability of many corporations to meet that obligation might well be doubted. Certainly the first result of this action on the part of foreigners would be to depress all values here, and to create more or less scarcity of money in this country. Every one can answer for himself whether this condition would be well for us or not.

But having passed the crisis, be it a destructive panic or a less suddenly harmful change of ownership, and that having happened which the world believed would happen, viz., a sudden lowering of the gold value of all of our money save gold, to the value of the silver which was in it, or in that which it represented, or in that in which it was to be redeemed, would that condition be any disadvantage to us? Every one will answer this question for himself. The man who owes a debt which is due or which is soon to become due, and who has property which he can sell for more of the lawful money of the United States than he could have obtained before the parting in value of our gold and silver coins, will doubtless say that to him it is an advantage. There are many persons in that condition, but not so many as one at first might think; and to every one of them there will be some loss which must be set off against what he will gain by paying his debt in this way. Every farmer will have something due to him either from his farm or from his

neighbors, and the loss on that debt must be deducted from the gain upon the payment of any mortgage which he may happen to have upon his farm. To all those whose debts are not yet due, but who have interest to pay, the loss will be likely to exceed the gain.

On the other hand, he to whom a debt is due, or is soon to become due, will say that the change of standard has been a loss to him, and of such there are vast numbers. We have but to look at the army of depositors in our banks, savings banks, and trust companies to gain some idea of the numbers who will be injured by such a change of the standard of money; and yet they form but a fraction of the whole. Of course many of the creditors are also debtors, and hence there will be some gain to them to set off against loss.

Thus it would seem to be probable that the gains and losses arising from the payment of debts will fall not far short of balancing each other not only in amount but also in the number of individuals, although when the hosts who are creditors of the savings and other banks are considered the belief becomes strong that the number of losers would exceed that of the gainers.

But these are not considerations which should govern a country in selecting the money which it shall give to its people to use under the force of its laws. Government should know neither creditors nor debtors. All are entitled to its protection, the one no more than the other; and whenever governments have attempted to aid one class at the expense of the other, the end has invariably been universal loss and generally universal ruin. The only question for government is: What is the best form of money? What will be the best tool to aid the people in exchanging property among themselves and with the people of other countries? That is best which is most uniform in value; which bears the same relation to the property of the world at sunset as at sunrise; on Saturday night, when the week's wages are paid, as on Monday morning, when the week's work began; at the end of the year, when the year's contract for rent, salary, or what you will, ends, as when the contract was made; the same at the end as at the beginning of every obligation, whether it be for an hour or for hundreds of years, as is the term of some

contracts made of late—in short, "so long as grass grows and water runs."

Bi-metallism is based upon the claim that it would meet this requirement more nearly than does mono-metallism. Such a unit of value would be perfection, but it has never been found, not even in the precious metals, whether they be used separately or in conjunction. The ideal can only be approximated, and that very roughly; and probably, for all time to come as in all time that is past, some will gain and some will lose because of a

change in the relation of unit of value to property.

We may console ourselves, however, with the thought that the "unearned increments" and the undeserved decrements of mankind caused by this change are far less than those caused by numberless other changes; for example, the opening of a street by public authority, or the building of a canal and then a railway, diverting from the old turnpike the traffic which nightly had filled the tayerns that lined its sides at the rate of one for each mile, leaving them valueless, cutting off the home market for a large part of the products of the adjacent farms, destroying their value and drying up many little villages. Similar results have followed the opening of the great West; gifts of land by government, creating sharp competition with the old farms of the East which had been bought and paid for by long years of toil; the use of coal, destroying the value of hard-wood land, and of natural gas, destroying the value of coal lands and of plants fitted for coal alone; and, I may add, governmental destruction and creation of values through protective tariffs, unjust and excessive taxation, and a thousand other measures interfering with liberty. These causes and others too numerous to name are daily taking from one man and giving to another; they have done so since man began, and will continue to do so while he is upon the earth. Would silver alone in this give such desirable fixity of relation? We need not go further than a year back to see that the price of silver can fluctuate so violently as to change the value of the silver in a dollar 20 per cent. in a few weeks. We see it change almost daily enough to disturb and make uncertain all business relations if silver were our standard of value. If our unit of value were based upon silver, fluctuating as constantly as it does, all business transactions would involve not only the ordinary considerations which now govern them, but also speculation in silver; and in a large portion of business the change in the price of silver would determine loss or profit. Comparatively few persons would be skilled in silver speculation, and their skill would give to that few the lion's share of business profits.

But perhaps this reasoning is all wrong. Perhaps if this country should throw its mints open and offer to coin all the silver which might be brought to them, and to make the silver thus coined a legal tender for all debts, then silver and gold would be linked together at the ratio of sixteen parts of silver to one of gold the world over, and thus they would remain fixed and unmovable forever in their relation to each other, the value of the mass of both metals only changing its relation to all other property with a slow vibration, so slow as to be felt only in the lapse of ages. Known facts do not justify this hope. As before said, the powerful nations composing the Latin Union have despaired of maintaining this or any other ratio. The unlimited use which Mexico, South America, India, and China make of silver in their legal-tender money fails to maintain this fixity of ratio. The expenditure by the United States in the purchase of silver of \$24,000,000 a year for twelve years and of nearly \$50,000,000 since last August, has failed to do it. But, says the advocate of free coinage, only give free coinage; that will take \$10,000,000 or \$15,000,000 worth of silver bullion off the market, and then the business of the United States will at once make steady the price of the \$3,880,000,000 worth of silver now supposed to be in the possession of mankind in the form of money, together with the uncounted millions in plate and ornaments, to all of which is to be added a product of \$150,000,000 each year and such increase of this yearly product as advanced price might cause. The advocates of free coinage say that the United States can do all this if their advice is followed; but this paper is addressed to the thinking, unprejudiced investigator. What does he say? We are told that all the silver money in the United States is interchangeable with gold at full value, and that the business of the United States has been able to accomplish this by the use which it has made of silver thus far. Granted; but that use has not raised the value of silver bullion.

Let us see what this country has done. It has bought and coined about \$420,000,000—coinage value—of silver, which is less than the world's product during the three years last past; though the actual product of the last year was \$34,000,000 more than that of the first year of the three. During the last nine years it has reduced the bank-note circulation nearly \$200,000 .-000, thus creating a vacuum in our domestic circulation to that extent, to be filled by something. It has been asked by the country for less than 60,000,000 of the actual dollars which it has coined, but it has represented the coined dollars by paper certificates, and has put them into circulation to almost the full amount of the coin which they represent. Ninety per cent., however, of the silver certificates are in the form of notes of ten dollars and less; thus they effect the smaller exchanges of property and service. At first, in the silver law of 1878, the denominations were fixed at not less than ten dollars, but as the total number of silver dollars increased it was found that the absorption of them in business did not increase; hence in 1886 the law was amended so as to authorize the issue of certificates in the denominations of five dollars, two dollars, and one dollar, and the conversion of the larger into the smaller denominations, with the result that the certificates in the denominations of five dollars and less now exceed in amount the total coinage since the amendment of 1886, and that the denominations of twenty dollars and over have diminished from \$65,000,000 to \$34,000,000. In 1886 the treasury of the government had become glutted with the ownership of silver dollars (94,000,000 of them had accumulated) which the people would not use either in the coin or in the certificate form then provided; since that time the country has gradually absorbed the treasury silver in the form and manner above stated. Thus our silver is in circulation in the form (small denominations) in which history shows that an overvalued money can be issued in the largest amounts, but which history also shows is the most dangerous form when distrust gets abroad in the public mind.

The coin certificates issued under the law of last July show

that even they cannot hold their own in our circulation against gold, although they may be redeemed in gold as well as in silver, and although it is the declared intention of our government to maintain their parity with gold. Owing to lack of facilities for printing, the government was at first obliged to issue these certificates in denominations of \$100. They began to be paid to the government for customs at once, and in three months' time they formed 19 per cent. of the receipts at the Custom House in New York, almost exactly displacing that amount of the receipts in gold certificates. Why was this? They were clean, attractivelooking bills, a legal tender, with the declared intention of the government behind them to maintain them at the value in gold which they bore when issued. Why were they turned back to the government, in amounts so out of proportion to their total? Because they were of a denomination which brought them directly in competition with the money of the world-gold-and because they were not gold. Later, when they were issued in the smaller denominations and no longer came in competition with gold certificates, they seem to have found a resting place in men's pocket-books, for the percentage of receipts in them had fallen by February 10, 1891, to 2.4 per cent. Since that time the proportion has again risen until it amounts to 30 per cent. but in their last increase they have only a little exceeded the increased receipts in silver certificates and greenbacks, all at the expense of gold certificates. The exact figures are:

	Gold Certificates.	Silver Certificates.	Greenbacks	New Coin Certificates.
February 10,	. 91.2%	2.4%	3.9%	2.2%
May 30,	. 27.8%	26.8%	15.0%	30.2%

What these late changes denote it is too soon to say; it is to be hoped that they will not continue long, for if they do the government may be compelled to take extraordinary steps to make good its promise of last July. The first incident of the coin certificates shows clearly to one who will consider the facts that there is even now a decided difference in the public view between the coin and the gold certificates when they are put side by side—the gold certificate is kept; the coin certificate is spent. Why not reverse the present law and practice governing the issue

of certificates, and prohibit all silver and coin certificates of a denomination less than twenty dollars, and all gold certificates of a denomination greater than ten dollars? This would give the masses a money good beyond all peradventure, and if silver can be maintained at par with gold by the laws of this country alone, it surely can be when represented by certificates of that denomination. If silver will not bear that test danger is near.

But, says some one, will not the legal tender quality maintain at par an unlimited amount of silver? No! it will not. Legal tender has failed too often to maintain the value of money to entitle it to confidence at this late day; but that subject would lead too far for the limits of this article. Will not the declaration of the intention on the part of the government to maintain the parity of the coins maintain that parity? No! it will not. The United States could, of course, sell its bonds or tax the people and use the proceeds indefinitely to redeem and store silver certificates, and thus could keep a certain amount of silver money in circulation at par; but it could not put all of that redeemed money into circulation at par unless the people had use for it at par, and the fact that the government was forced to tax its resources and credit to redeem any portion of our money would be a demonstration that the people had not use for the whole of it.

In closing I ask the candid investigator of this subject to answer for himself the questions with which this paper began and also this further question: Why should this country allow itself to run any chances of having a depreciated money? Who will be benefited thereby? If we provide that when there is a necessity to maintain parity the government shall redeem, why not provide for a cessation of the cause which has produced the necessity? Why not cease the creation of the money when it does not maintain itself? We have no such provision, and because we have not there is to-day a sharp discrimination between our gold money with its representative the gold certificate, and our silver money with its representatives; and this in spite of the solemn declaration of the government of the United States in the law of July 14, 1890.

CHARLES S. FAIRCHILD.

## WHY WE NEED CUBA.

Our statesmen, as early as the first quarter of this century, were keenly alive to the great concern our people naturally have in the island of Cuba. Early in 1823, Thomas Jefferson, who had already added 1,182,752 square miles to the territory of the Union, including Louisiana and the mouth of the Mississippi, and who had sent explorers across the Rocky Mountains to the mouth of the Oregon, wrote from Monticello to President Monroe these far-sighted words:

"The addition of the island of Cuba to our Confederacy is exactly what is wanted to round our power as a nation to the point of its utmost interest."\*

Later in the same year he wrote again:

"I candidly confess that I have looked on Cuba as the most interesting addition that could ever be made to our system of States. The control which, with Florida Point, this island would give us over the Gulf of Mexico and the countries and isthmus bordering it, would fill the measure of our well-being." †

Almost simultaneously with Mr. Jefferson's first letter, John Quincy Adams, writing as secretary of state to John Forsyth, our minister at Madrid, referred to Cuba as "almost within sight of our shores," and added:

"For a multitude of considerations it has become an object of transcendent importance to the commercial and political interests of our Union. Its commanding position with reference to the Gulf of Mexico and the West Indies; its situation midway between our southern coast and the island of Santo Domingo; its safe and capacious harbor of the Havana, fronting a long line of our shores destitute of the same advantages; the nature of its productions, and its wants, furnishing the supplies and needing the return of a commerce unusually profitable and naturally beneficial; give it an importance in the sum of our national interests with which that of no other foreign territory can be compared. Such indeed are, between

<sup>\*&</sup>quot; Jefferson's Complete Works," Vol. VIII., p. 300. †Ibid., pp. 316–17.

the interests of that island and of this country, the geographical, commercial, and moral and political relations formed by Nature, gathering in the process of time, and even now verging to maturity, that looking forward to the probable course of events for the short period of half a century, it is scarcely possible to resist the conviction that the annexation of Cuba to our federal republic will be indispensable to the continuance and integrity of the Union itself."

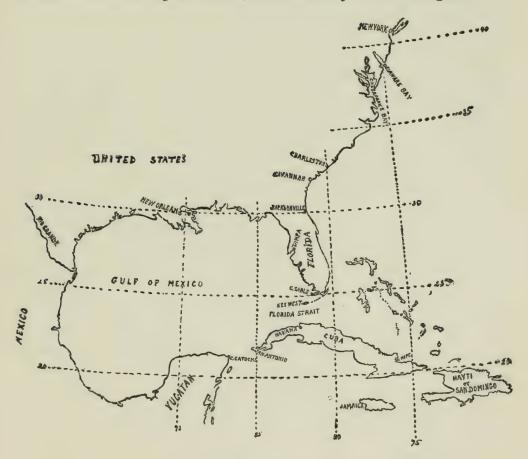
This was written sixty-eight years ago, and the immediate occasion for it was the imminence of war between Spain and France.

Passing over the sentiments of similar import that Mr. Calhoun expressed in the early days of his public life, we may recall that so cautious and deliberate a statesman as President Van Buren instructed the American minister to Spain in 1840 to inform the Spanish government that, in the event of any attempt to wrest Cuba from her, she might securely depend on the United States to aid in preserving or recovering it. This remarkable assurance was virtually repeated later by Mr. Webster in a dispatch as secretary of state on January 14, 1843. Moreover, during the administration of Mr. Fillmore, Edward Everett, then secretary of state, addressing the British minister at Washington in reply to a proposition on the part of England that the United States should unite in a tripartite perpetual guarantee of Cuba to Spain, thus summed up the inherent vital relations of that island to our own country:

"It bars the entrance to that great river which drains half of the North American continent. . . . It keeps watch at the doorway of our intercourse with California. . . . Territorially and commercially, it would, in our hands, be extremely valuable; under certain contingencies it might be almost essential to our safety."

In other words, Cuba so nearly touches our shores and is so manifestly of our own geographical system, that no American statesman may leave its immediate future out of his earnest, if not anxious, consideration. Any maritime power that should occupy it could readily make a mare clausum of the Gulf of Mexico; for Cape San Antonio, its western extremity, is separated from Cape Catoche, on the coast of Yucatan, by little more than one hundred miles of seaway, while Cape Hicacos is only a hundred miles distant from Florida, the larger part of the distance being filled by the Bahama banks and islets. Thus, mani-

festly, this great island dominates not only the Gulf of Mexico, but all the approaches thereto. Moreover, it lies broadside to the track of our commerce by water with Mexico, and what is of still greater importance, to the trade of the chief part of our cotton-producing States, not only with Europe, but with the North Atlantic seaboard. Its capital city is only seven hours distant by steam from Key West, less than sixty hours from the mouth of the Mississippi River, and but sixty-six hours by rail and water via Tampa, Florida, from the city of Washington.



Such are the geographical and military relations between Cuba and the United States. Her commercial history, also, teaches that her political incorporation with this republic would be in obedience to the laws of national gravitation; for our people consume much the largest part of all that the island produces for exportation. Notwithstanding incredible commercial shackles, a perversely false political economy, and oppressive

taxation, together with the absence of all semblance of free institutions under Spanish rule, such have been and are the natural agricultural advantages of the island that as early as 1831-40 it had become an exporter of products to the United States to the yearly value of \$15,000,000. This average, during the next decade, was increased to \$24,500,000. For the seven years ending with June 30, 1875, the value of the sugar alone exported from Cuba to this country aggregated \$470,730,578, or a yearly average of \$67,247,225; while during the last period, the aggregate value of Cuban products exported to England was but \$154,700,000. Since that date, this single one of the Antilles has continued to export to the United States a larger amount of merchandise than any other country has done, except Great Britain and France. The value of these exports between 1875 and 1889, inclusive, was \$872,969,000, and the total between 1859 and 1889, inclusive, was about \$1,660,000,000. On the other hand, our exports of merchandise to Cuba, meanwhile, have aggregated only about \$450,000,000, and the balance of trade against us has, therefore, been as large as \$1,210,000,000. But this balance was not settled directly with the Cuban people, for while exporting to Cuba barely \$85,234,455 in specie, we imported therefrom during the same period \$49,645,559 in specie, thus leaving only \$35,588,896 to go toward the settlement of the adverse balance already stated. It follows, therefore, that fully as much as \$1,160,000,000 must have been paid through Europe, or mainly through England, as we know to be the case, and that it must have been paid in gold—in an amount of that metal less by only \$68,000,000 than all that was obtained from the placer and quartz gold mines of the United States during the same period.

As is generally known, much the larger part of our import trade with Cuba has been and is in her saccharine products; but it may not be generally known that while our total importation of those products from all quarters, including that island, during the fifteen years ending with 1884, aggregated \$1,347,500,000, the Cuban quota amounted to \$835,000,000, or 62 per cent. of the whole. As early as 1865 Cuba furnished  $85\frac{5}{8}$  per cent. of the sugar imported by the United States. In 1885 Cuba's quota

had been reduced to  $65\frac{5}{16}$  per cent. It increased to  $71\frac{1}{16}$  per cent. in 1888, but was reduced in 1890 to  $43\frac{5}{8}$  per cent., the value of the whole sugar importation aggregating \$89,737,284. Between 1869 and 1882 our sugar importations from the island aggregated \$800,000,000, showing a yearly average of \$57,142,857. And we may add, as indicating to what extent the United States have been absorbing this one Cuban product, that between 1868 and 1872, of the total exportation of Cuban sugar from the island in boxes, 40 per cent. came to the United States, together with  $89\frac{7}{8}$  per cent. of that which was supplied in hogsheads.

Our Cuban commerce has exercised a manifest influence in the maintenance of our shipping interests. In 1875, when the total imports from Cuba aggregated \$66,445,536, no less than \$52,637,276 of that amount, or 79½ per cent., reached our shores on American ships; and for the same year, 90½ per cent. of our export trade with that island was likewise under our flag. Moreover, of the American ships engaged in foreign commerce that were entered in the ports of the United States for the quarter ending June 30, no less than 26 per cent. were employed in the Cuban trade, carrying 25 per cent. of the whole tonnage thus freighted. It is also to be noted that comparatively little of the sugar imported from other places than Cuba has reached our ports under the American flag, while in 1886, 67½ per cent. of Cuban exports to this country were in American vessels.

Of the physical features of the island, it should be said that, following its axis, so to speak, it is fully 700 miles in length, but nowhere wider than 130 miles, so that no part of it is more than 65 miles from the seaboard, and that it has an area of 36,013 square miles. A broken chain of mountains, with several lofty peaks, one of which, Pico de Tarquino, has an altitude of 7,670 feet, extends in a general east-and-west direction, dividing the water courses that flow northward into the Bahama Channel from those that fall into the Caribbean Sea. It has more than 1,700 miles of coast, exclusive of the numerous bays and harbors with which that coast is indented, especially in the north. These bays and harbors are of superlative commercial value, being deep, easy of access, sheltered, and susceptible of

thorough defense at comparatively small cost. Though almost touched by the Tropic of Cancer, and lying southward of it, Cuba is comparatively free from those tempests which so often have seourged the lesser Antilles, while earthquakes have been rare and harmless. Of course the climate is tropical, but the heat is sensibly tempered by the sea breezes, and the uplands have a bland, delightful atmosphere. The months of August and September are most disagreeable and unhealthy on the coast. Through December, January, and February the climate is charming. At Havana, in winter, the thermometer stands between 50° and 60° Fahrenheit; the mean heat of noon is about 70°, and that of the hottest months is 84°. Sometimes, on the uplands of the interior, the temperature falls below the freezing point, and thin ice forms on the highest ground; as, for example, it did in January, 1801, and several times within the last ten years.

With such a climate, Cuba is singularly favorable to animal as well as vegetable life. The soil is well watered, as a rule, of exceeding fertility, and rich in products that are at once the necessities and the luxuries of civilized man. Indian corn, which was indigenous in the island, yields two crops a year there, and rice grows upon the uplands as wheat does in the United States. The sugar-cane fields begin to be ready for harvesting in October, but are richest in saccharine matter in January, February, and March. For this reason a sugar plantation in Cuba requires a materially smaller number of laborers than anywhere in the United States. Few venomous reptiles exist in the island, and there are no poisonous serpents at all; while the bite of the tarantula is dangerous only if neglected.

Cuba, with a smaller area than the State of New York, has a much larger acreage of richly productive land, as is attested by the extraordinary value of the exported agricultural products of a small fraction of the island—the only part provided with labor for sugar culture. Hardly 15 per cent., or 5,400,000 acres of the land, has been adapted as yet to agricultural uses, yet no country of the like area has contributed so largely in the last 25 years to the commerce of the world in agricultural staples, in spite of all the disadvantages of the Spanish colonial system.

While, as we have seen, sugar culture has been the great

feature of Cuban agriculture, and while its commercial results have been remarkable, considering the small acreage available for sugar plantations and the meagre labor employed, it must be remembered that the island produced as much as 64,153,000 pounds of coffee in 1833. A very large part of Cuba, or nearly all the uplands, is specially favorable for the growth of a grade of the coffee berry that is equal to the best Mocha. Moreover, the same kind of land is equally well suited for cacao, the cultivation of which is probably the most profitable of all agricultural industries. Both these products can be raised by white labor on small plantations, and call for the employment of small capital compared to that required in the production of brown sugar and molasses. But here has been interposed the same Spanish colonial policy that interdicted the olive and vine in Mexico and wheat in Buenos Ayres. In 1832 the Spanish government imposed a differential duty of \$12 per barrel on foreign—that is, on American—flour imported into Cuba, whether under the Spanish flag or not. This led to immediate retaliatory legislation on the part of the United States, which country was then the chief customer for Cuban coffee, as it is now for Cuban sugar. speedy result was that coffee was virtually excluded, in competition with the Brazilian staple, from this market, and its culture had to be abandoned.

So rich and diversified have been the agricultural resources of Cuba during the last fifty years, that attention has been diverted from the great undeveloped mineral wealth of the island, which includes gold, copper, lead, iron, asphalt, and petroleum. The Spaniards found the natives possessed of trinkets of gold to a notable extent, and in the outset of Spanish occupation, placer or fluvial gold-mining was carried on extensively in the eastern and middle sections of the island with material results. Humboldt placed Cuba within the auriferous belt of this hemisphere. From my own personal experience in the course of a year's residence, with daily surveys on horseback, after four years' previous acquaintance with the mineral regions of California, I am satisfied that there is a future gold field in the island awaiting profitable exploitation. As for copper, \$19,000,000 worth of that metal was exported from the quarter of Santiago de Cuba

to England in the six years preceding 1850. In this connection, also, within my personal knowledge, there are surface indications of copper to an exceptional extent in the central part of Cuba. Iron of the very best description, suitable for the manufacture of Bessemer pig and most desirable for mixture with our own ores, has been found in large deposits in the district of Santiago de Cuba. These deposits, moreover, are so close to the seaboard and are so easy of approach as to promise exceptional resources for our iron and steel industry, which during the past year has become the largest in the world. The surface indications of petroleum and asphalt also give notable assurance of important industrial results. Moreover the middle and eastern sections of this island are very rich in timber for construction, including great forests of mahogany and valuable rare woods for the interior decoration of houses, for cabinet furniture, and for ship-building.

From what has been said, it will be seen that the United States have great and varied interests in all that concerns the future development of Cuba's natural resources. These interests make it an essential complement to our industrial, agricultural, commercial, and military systems, and, logically, should lead our people to desire its early acquisition. In absolute fact these interests are too great and various to endure for a much longer period the continuation of commercial relations with the island which are far from neighborly when they are not directly inimical. All considerations urge us to this acquisition, without regard to European opinion or antagonism. But in all we do toward that end, we should be not only just and generous to Spain, but in the highest degree mindful and considerate of her natural and national sensibilities. On the other hand, no sinister diplomacy on the part of other governments should be tolerated. A transfer of the sovereignty of the island, however, is to be reached only through the higher ranges of statesmanship.

In this immediate relation it may not be either impertinent or amiss for the present writer specially to remind the intelligent commercial and business classes, as well as the public men, of the eastern Atlantic States that their predecessors opposed in succession the acquisition of Louisiana and Florida, the annexation of Texas, and the acquisition of California, and were not unwilling to yield a material part of Oregon to the English. And yet every acquisition of territory by the United States, from that of Louisiana in 1803 to that of Alaska in 1867, has been fraught almost immediately with special commercial and industrial benefits to the people of that section; benefits all of which, however, it is to be added, have been shared unstintedly with the whole commercial world, to such extent that other nations should regard with high favor the transfer of Cuba to our hands. Our whole history affords a guarantee that as a part of the United States the island of Cuba would rapidly become of far greater value to the commercial world than it can ever be as a colonial dependency of Spain.

THOMAS JORDAN.

### HOME LIFE IN FRANCE.

In the good old times when international ill will was even stronger than it is to-day, English travellers and linguists made their countrymen believe that the French had no notion of a home, because the English word cannot be rendered by any single French equivalent, but requires an article, a preposition, and a pronoun, "le chez soi." If one were inclined to go into verbal subtleties, it might be argued that "chez" means a house (it is nearly related to casa), and that "home," of which "hamlet" is a diminutive, means a village. The truth is that words prove nothing, as all depends upon association. The sentimental significance of "oīzos," or "domus," or "casa," or "chez nous" depends upon habits formed in the mind by the slow influence of the dwelling place. For me, I have only literary associations with the Greek, Latin, or Italian words, but the French "chez nous" and "chez moi" have living associations for me, like the English "home," and I find, having equal experience of both, that there is no perceptible difference. "On n'est nulle part aussi bien que chez soi" seems to me a full equivalent for the English "there is no place like home." Indeed, I may go a little further and say that the expressions "chez moi," "chez soi," "chez nous," have an element of cosy selfishness that seems to exclude the outer world even more decidedly than the English "home." A young French married couple employ the "chez nous" with a peculiar significance, the "nous" being their own two dear selves and nobody else. In both countries these expressions have an extended sense with reference to the nation; as we say in England "the Home Government," "the Home Secretary," and as Londoners say "the Home Counties" for the counties nearest the metropolis, in France "chez nous" is constantly used for the nation, and in a more restricted sense for the district or neighbourhood where the speaker lives.

Much of the home feeling depends upon the dwelling place

itself, and upon the situation of it. I will briefly consider this influence of the dwelling place before studying the life of the Imagine a large, rough old house belonging to a French country squire. I do not mean to imply that all country squires have large, rough old houses, but some have still, especially in the remote rural districts. Do not think of it merely as a farm house—it is better than that; but in the case I am thinking of, which is not an uncommon one, the house is rough and without art; still, you see that it is a gentleman's dwelling. The floors, perhaps, are of red brick, except that of the drawing room, which is probably of oak. Those of the bedrooms may be of plain deal. There are few carpets, and those are small ones, showing the nature of the floor all round them. The ceilings are likely to be disfigured by huge beams. In some of the principal rooms there may be wainscot painted grey; in others, cheap wall papers, very seldom renewed. The windows are tall, the small panes separated by thick wood, the shutters cumbersome and inelegant. The furniture is most of it of the eighteenth century, with some more modern things interspersed. The entire habitation is full of light, space, and air; but it is very likely to be illarranged, and perhaps you may have to go through one room to get into another. The farm buildings are close by; perhaps the back windows of the château look out on the farm yard. The stables are spacious, like the stables of a large farm; so are the barns and other outhouses. The gardens are vast and productive, but not ornamental. The lawn before the house is, in reality, a meadow.

Now, what is likely to be the influence of a habitation of this kind? The squire feels no restriction as to space, and he is not afraid of spoiling anything; he can spread himself and his belongings. His dress, like his house, is simple, strong, and unpretending. He will come, perhaps, with his nailed boots and his gaiters, into the dining room, and smoke his wooden pipe everywhere except in the saloon. As for margin, there is no end of margin—everything has margin; there is room to go round everything, room to put everything, room for exercise and sport. Besides half a dozen farms, there may be a thousand acres of woodland to wander over with a gun. It is a healthy existence

with its space and its liberty; and there may be culture too. Montaigne lived this country life, which did not prevent him from having a book room in one of his towers; and in our times there is the daily postman with his news of the outer world.

Now, for a contrast, think of life in a little Parisian apartment. Suppose it is in one of the very pretty and elegant new houses. The courtyard is as clean and tidy as possible; for no tenant is allowed to leave anything there, not even a deal board. The entrance is quite sumptuous with its panels of cut stone, its pilasters, its sumptuous oak doors with heavy panels and caryings and great nickel-plated handles set in marble. The staircase—I am supposing a good new house—is of oak, and is hung with some stuff to imitate tapestry. All this seems spacious enough, but it is only a passage. The apartment is a marvel for economy of space and for high finish in everything: the floors are of waxed oak, the latest inventions are applied to windows and fireplaces, the furniture is elegant, to suit the rooms, and the people are dressed like the prints of the fashions. Is it not easy to see that the two residences I have sketched must affect habits and character quite differently? The French are an impressionable people, and they receive, in course of time, an influence from their habitations which becomes permanent. It counts for a great deal in the peculiarity of the Parisian type. Not that in the provinces all people are even relatively so spaciously lodged as my squire. On the contrary, in the country towns the lodgings are often very narrow, and ill ventilated, and unwholesome; still, on the whole, provincial life has space and a certain roughness, whilst Parisian life is cramped by want of room and has gone into the direction of elegance as a sort of compensation. Both are perfectly French, for it is in the French nature to be very rustic or very urban. You have the two extremes quite faithfully reflected in French painting.

The present tendency is to carry Parisian finish into the remotest provinces. This is chiefly the work of the architects, who are now very numerous in France and also very accomplished. They build on a smaller scale than their predecessors, but with more intelligent arrangements for convenience and more perfect finish. There is very little elegance in the old rural houses and

not much luxury of any kind-except in the great châteauxbut houses built within the last fifteen or twenty years show a marked improvement. The internal arrangements are now as convenient as they formerly were awkward and uncouth. I went through one of these modern country houses lately and found every imaginable convenience, a dressing room for every bedroom and a certain English closet (in a round tower) on each floor. Polished floors of marble or oak gave no encouragement to hob-nailed shooting boots, and the dining room was so genteel that it seemed a necessity to dress for dinner. Can we suppose that children bred in this elegance could be the same as those brought up in the rough, spacious châteaux of former times? Here, instead of guns and boars' heads, the walls are adorned with cabinet pictures. And the modern elegance goes into every detail. The carriages are delicate and light, and if the owner has a sailing boat on the river it is brilliantly varnished. Parisian perfection requires a corresponding perfection in all things, and I am of Emerson's opinion that in the country a certain roughness has its advantages. Rural life is better without the superfine.

The effect of wealth on the home life of all countries is, of course, enormous; but in France it is, perhaps, even more marked than elsewhere. Here are two main points: the poor, or even the middling Frenchman, is very narrowly lodged and very stationary, seldom leaving his own little town or village; the very wealthy Frenchman has plenty of room everywhere, and he is migratory. Here is an example known to me: Baron D. has a large town house in Paris—an old family mansion, worth in itself three millions of francs—and besides that he has half a dozen or more châteaux on his country estates. He goes from one to the other when it is not the Parisian season; he pays visits in châteaux belonging to his friends; and he stays with his family the obligatory weeks at the seaside; all this without leaving France. He goes abroad also, but less than an English nobleman. In the existence of this family the principal luxury is change of place; for although they have a full staff of servants, they live quietly and reasonably. Amongst so many houses have they a home? They may have preferences for one

residence amongst many, and even for part of a residence. In these cases the preference is usually for rather humble and

plainly furnished rooms, never for state rooms.

The smaller French aristocracy, the inferior gentry, still keep up the old custom of wintering in some provincial capital, in the chief town of a department or even in the most important little town in a district; but those of the great nobility who are still wealthy have almost entirely abandoned this custom. They all winter in Paris, unless they go to the south for greater warmth. There is, for example, the distinguished old family of de Voguë. The chief of that house has a noble old château at Commarin, where the great round feudal towers are connected together by many habitable rooms, the whole still surrounded by a large moat and in a richly-wooded park. He comes and stays at this château still for some weeks every year, and he also possesses a very fine old mansion at Dijon. I myself drove from one to the other in 1889, through some of the finest scenery in France; and I thought how happily situated the family was to have its country house within a day's drive of its town house, and both so interesting. The town house is a delightful old residence containing rich examples of domestic architecture from the sixteenth to the eighteenth century. There is a noble tapestried guard room that might serve as a banqueting hall. The courtyard is adorned with a magnificent marble arcade rich in sculpture, and in the interior are several fine rooms, including a library with hundreds of noble folios still in well-preserved old bindings. One of these rooms, the saloon, seemed strangely bare, and my guide said: "The wainscot here was extremely beautiful, so M. de Voguë had it removed to Paris, where he has built a new mansion. The family never come here now; this house is abandoned." Dijon no longer offers a sufficient variety of interest for a grand seigneur of the present day. There is no king to call him to Paris, but there is still society.

I have mentioned aristocratic living, la vie de château, because it still exists amongst the wealthier families of the noblesse and is imitated with more of modern luxury by the rich financiers and leaders of industry. M. Eiffel paid two millions of francs lately for a town residence, and when life is established on that scale

everything is usually in proportion. I was in Paris last year when M. Eiffel made his purchase, and was told that a price of that kind was not extraordinary for a private mansion of some importance. Still, if we look upon France as a whole, it is not the life of the rich that represents the nation now so much as that of the middle class, and that of the very numerous rural gentry of limited means. Middle-class life is worth study, because all the inferior classes make it their object and ideal, and their prudent and successful members are continually rising to swell its numbers. The poorer gentry are also continually dropping down into the middle class, so that it becomes more and more numerous. And in the course of one or two generations it is very easy to foresee that the farmers will be middleclass men instead of French peasants, as they used to be, so that the force and importance of the bourgeoisie will be enormous. In fact, it is this class which has succeeded in founding the Republic.

An Englishman who begins to know France is struck at first by the small number of servants in the middle classes. The incomes are usually limited, and the French bourgeois has long since come to the conclusion that a small house, few servants, and few children are the practical solution of the question how to save money out of a small income. I have often been struck with the patience of the French middle class in putting up with incredibly inconvenient residences—an undesirable inheritance from preceding ages. The private dwellings of shopkeepers are often ill arranged, badly lighted, and insufficiently ventilated. Some are so dark, so confined and malodorous, that one hardly knows. how children can be brought up in them. No doubt in many cases the mortality is diminished by personal cleanliness; still it is frightfully high in some of the picturesque old towns, exceeding fifty in the thousand in such places as Morlaix and Douarnenez. This fact is almost entirely due to the bad construction of old houses, to insufficiency of space and air, and to defective drainage. Many French physicians and journalists are now fully alive to these evils and are using their influence to diminish them. Even Marseilles is going to have an efficient system of drainage; but that, although decided upon, is still in the future. Awkwardness in the internal arrangements of houses

and the absence of provision for natural necessities were so common in old France that any good modern house is more habitable than the Versailles of Louis XIV. And the number of good modern separate houses is increasing with great rapidity, especially in the outskirts of the towns. There has also been much improvement during the last thirty years in the condition of the country houses belonging to the smaller gentry. They are kept with a stricter neatness and are more habitable.

The reader who knows France only by hotels and restaurants can hardly judge of the way of life in private houses. It varies much with individual tastes, but, speaking generally, it may be said that in private houses the living is at once simpler and better than in the hotels. There are fewer dishes and they are cooked more carefully. The middle classes live better than the poorer gentry for the following reason: a wealthy nobleman can afford to keep a chef—an experienced male cook with subordinates—but a poor squire has to trust to female cooks, and any woman will call herself a cuisinière. In the middle classes the wife always understands cookery, and in the poorer middle class she does all of it that is delicate and difficult with her own hands, bringing to the task an amount of culture, care, and cleanliness—besides economy—that no ordinary servant will ever give. The consequence is that the middle-class man has generally a better and more regular table than those immediately above him in the social scale. I have said that, as a rule, living in the middle classes is simpler than in the hotels, as well as better; but if the master is a gourmet and has not much else to interest him, the living may be elaborate enough.

Children being nearly always at table in France, and conversation often being animated amongst their elders, they hear a great deal that was never intended for them, and they get a sort of education in talkativeness by mere example. They may make little use of this in the presence of strangers during boyhood or girlhood, but it bursts out when they get to a talking age.

It is recognized by custom that when a family is in private every one has a right to talk or not as he pleases, and silence being permitted, the taciturn will take advantage of it; still, nothing is more national in French life than talkativeness at

meal times, even when the family alone is present. This does at least keep up the national power of talking, though the mill wheels of conversation have frequently very little grain to grind. Talk of this kind has some use as a stimulating exercise of the lighter faculties, which in other countries are often left unexercised. The merits of it are its facility of expression and its ample choice of language; the defects of it, in France, may be included under the one head of insufficient or inaccurate information. Still, in the middle class you will find the most accurate knowledge of special subjects. All the university professors, most of the men of letters, the artists, the scientific men, belong to the middle class so far as they can be said to belong to any definite class at all, and though in home life they are surrounded by women and children who know little, they will often throw a strong light upon a subject for a moment.

French politeness to women and French kindness to children have placed men at a disadvantage in home life since the old paternal authority has died away. There is a clatter of small talk, and unless the father can take a share in it, he may sometimes feel solitary at his own table. After a day of business, he may come home tired and may not feel equal to the innocent but rather light babble of a French family, and then the talk will go on without him. Or he may make an effort to be amusing and not be quite successful, from the lack of youthful elasticity; or he may want to talk about something that interests him, but that is beyond the family audience. In former times the father had the paternal dignity and could take a becoming refuge in that; in the present day he is but one of the members of a little democratic home parliament that receives or rejects his opinions without deference. Again, in French families, particularly of the middle classes, the preponderance of the mother is very strongly marked. It is easily explicable by very evident causes. rules the house in detail, she gives orders to children and servants, so that the father appears infrequently as an acting authority. She wins power by her activity and attention to detail, and by her presence. The father is away during the daytime and is considered to have but two duties in life, regularity in monthly payments for household expenses and regularity at meal times.

The monthly payments are not seen by the children, still less the labour and intelligence that go to the earning of them, but they feel the maternal power. The servants are usually women, and a man cannot command women; he may ask for services, gently—he does not give orders as he would to a man servant.

Rather overpowered at home by the feminine and infantine, or puerile, majority, the Frenchman often, though not always, seeks refuge in the cafe. There he meets with men of his own age, often of another class, but he does not look very closely into that, and he spends his evening sipping beer and smoking. Such excitement as there is in the delights of a café in a small country town is surely of a very mild kind, yet it may be better mental entertainment than any enjoyed by the wife who sits alone and tries to read or knit when the children have gone to bed. There are husbands, perfectly irreproachable as to all serious duties and obligations, who leave their wives every evening just after dinner, to stay at the café till eleven. They see nothing wrong in it; they do not go for the drink and are never tipsy; they go for a little intercourse with mature minds of the male sex. They are merely keeping up a bachelor habit; still, it is a kind of semi-separation. Taking French life as it is, with the predominance in home life of the feminine and the immature, and the rarity—in comparison with England—of hospitality in the house, the café seems to be a necessary institution. The explanation of it is not the need of drink, which might be had at home, but the want of masculine society.

The smallness of French dwellings is probably answerable for the tendency to put infants out to nurse and to send boys to boarding school. In a small apartment boys are noisy, trouble-some, and in the way; and owing to French indulgence of children, they are likely to become unruly. Now, in France the facilities for getting rid of boys are very great and very tempting. The state has lycées and colleges all over France, where board and education are given below cost price, and if a father is a Republican, or simply a Liberal, he will send his son to one of these. I have seen an absurd statement in an English periodical that only very poor people send their boys to the lycées. M. Eiffel, who bought a town residence for two millions of france,

sends his son to the Lycée Janson, and there are many other similar cases. If a father is clerical in his tendencies, he has the ecclesiastical schools. The Church is even more hospitable than the state; she gives food, lodging, and education for less than the cost of the food alone. Again, the Church relieves parents even more effectually than the state, as she keeps the boys longer and more vigorously away from home. She has her own reasons for this: she desires to substitute her own authority for parental authority and her own influence for the contagion of "the world "-that is, of the few occasional lay visitors who may spend an hour or two in the father's house. With all these facilities, there is every temptation to insure quietness in the narrow home by the simple process of banishing the boys. The class in which home education is most frequent is the wealthier part of the nobility. Being anxious to avoid the association of their boys with the sons of their social inferiors, they often have them educated at home by private tutors, always either priests or strictly Catholic laymen. This, no doubt, is the best way of preserving some degree of parental influence, and it is healthy, physically, for the boys, who escape from the confinement of the schools and live, instead, in various country houses. Unfortunately, this home education in a narrow and exclusive class, full of reactionary prejudices, has an evil effect in fostering social and political illusions and in preparing men who might have been suitable for the eighteenth century, but who will be out of place in the twentieth.

A home education in the wealthy French nobility is, however, much better in one respect than such an education could ever be in the middle class, for this reason: the nobility see a good deal of society, though it is almost exclusively amongst themselves and quite exclusively amongst people of their own way of thinking. Home-bred boys in the *noblesse* are, therefore, not so much shut up as they would be in middle-class existence. The rich nobility, by change of residence and by travel, also see much more of the world and get a sort of education through their eyes.

P. G. HAMERTON.

# THE AMERICAN COPYRIGHT ACT.

So much has been already written on this law that I propose in this article to confine myself chiefly to an examination of its general policy, and to draw attention to the effect of the act in

European countries.

A very definite intention pervades all previous legislation, and the object of its enactment is clearly set forth. In the United States it is "to promote the progress of literature and art by securing for limited times to authors and artists, the exclusive right to their respective writings and art productions." In Great Britain it is "to afford greater encouragement to the production of literary works of lasting benefit to the world." In other countries of Europe the intention, though not defined, is obviously the same, and nowhere do we find the subject of book manufacture mixed up with copyright-property protection

except in Holland.

That this policy should be departed from by the United States will not surprise those who have watched commercial legislation in that country during the last twenty years. Under the specious guise of "protection to native industry," all sorts of monopolies have been promoted there. But though France, Germany, and Spain have based their commercial policy on similar principles, yet one and all of them have recognized that the civilizing and humanizing influence of literature and art is far too precious to be tampered with by manufacturing restrictions. The United States, however, could not resist the temptation to try to move the literary centre from the Eastern hemisphere. That this has been the object of the manufacturing clauses in the new law appears from the evidence of Mr. Kennedy before the House Judiciary Committee at Washington on behalf of the International Typographical Union. He says: "Its effects will be to greatly stimulate printing in the United States," and, indorsing the opinion of the London "Times," adds: "By this law the literary and book-publishing centre of the English world will move westward from London and take up its abode in the city of New York."

The peculiarity which distinguishes this act from previous legislation is that it refuses to protect copyright property unless the book containing it has been set up and printed within the United States. A particular copy of any book is protected, and the stealer of it is punishable by law; but if the mortgage of the American printer is not satisfied, anybody may utilize its contents—perhaps the fruits of a year or two's toil—to enrich himself at the author's expense.

I quite sympathize with the promoters of this act. It represents a noble effort on the part of Americans to fix on their statute book the grand principle that the labourer is worthy of his hire, and that the fruits of his toil deserve the protection of all civilized countries, irrespective of their place of origin; but I cannot refrain from referring to the hampering restrictions in it which so formidably neutralize this action. Yet, notwithstanding my strong objections to its blemishes and my protest against its deviation from the pure policy of previous acts, I do not hesitate to express the opinion that the new act (exclusive of its manufacturing features) is better and much simpler than our own cumbrous law, and that Great Britain might with advantage and with but slight amplification substitute it for her I know that the surrounding circumstances have been too strong for copyright legislators and that they have been, most unwillingly in many cases, compelled to yield to influences too powerful for them to overcome.

I have referred to books as if they were almost the only objects of copyright, because I think them typical enough to illustrate the purport of this paper, but I am not unaware of the liberal largeness of American, foreign, and British copyright legislation, and that it takes under its sheltering care every production in the literary, scientific, and artistic domain.

To gauge some of the results likely to issue from this change of law, it is necessary briefly to notice the current course of trade on the two sides of the Atlantic. At the present time books popular in both markets are generally reproduced in each. Books by English authors are set up in type and stereotyped in England, a set of the stereotype plates is sent over to New York or Boston, and the United States demand is met by copies printed from these plates in those cities. But this method of supply is often restricted to the most popular books in theology, science, travel, and biography, illustrated books, and books of which it is especially desirable for the authors to

superintend the preparation. Popular works of fiction, which constitute the greater part of the reading supplied by Europe to America, are set up in type both in Great Britain and in the United States, because the markets in each require different classes of editions. In Great Britain they generally appear in two or three expensive volumes, which are sold chiefly to circulating libraries. These editions serve to gauge the public appreciation of the work. If it is received with fair favour it is very soon reprinted in a one-volume hand edition, and this is, if required by the public, succeeded by a vet cheaper edition, and so on until it becomes a twoshilling or shilling volume on the railway book stalls. By this method the British publisher considers that he gets better remuneration for the author, and I do not think his judgment is much at fault. Experiments have been made of producing cheap popular editions in the first instance, but evidence was given before the British copyright commission showing that these experiments were very seldom successful, though made by such different publishers as Messrs. Bentley and Son, the highpriced novel publishers, on the one hand, and Messrs. Routledge and Sons, the producers of cheap literature, on the other.

The publishers of the United States, recognizing that they had to deal with a differently situated class of readers, adopted other methods. They issued their books in a form at once available for family use and purchase. They began at once by issuing the one-volume hand edition at a moderate price, and seldom reduced the price of their copyright novels till some long time afterwards, except so far as it has been necessary of late years to do so to meet the competition of the unauthorized editions of English novels. This course was forced upon them by the very extensive field over which they were called upon

to make their distribution, and by the absence of the circulating library system; but it has not obtained for the American writer of fiction the same amount of success which his British colleague has met with.

But there is another class of book which is met with on both sides of the Atlantic, viz., the moderately popular novel or the novel by a young writer not as yet much known to the public. And it is this class which will be most affected by the new law. Every writer instinctively desires as large a circulation for his writings as possible, both to enhance his reputation and to satisfy his purse. The writer of such books will be under the necessity of producing his book in the United States to secure copyright there, and of introducing it to his own market in the American form (which is not at present favourably received or liked by English booksellers), or he will be obliged to reset it specially for the English market at a cost which he can ill afford. He is debarred by this law from bringing out an edition in this country, his home, at much less cost to himself than the United States edition and circulating it throughout that country, though he could do it at a lower price and with greater advantage to himself and to the public on both sides of the Atlantic. Is this restriction calculated "to promote the progress of literature" in the United States?

There is also another grade of writers who, though not so much before the public as those mentioned above, are still entitled to fair play, viz., the writers of books not sufficiently successful to justify their speculating in publishing them in both hemispheres, or who have perhaps been unable to induce an American publisher to speculate in producing an edition in a country where the writer is unknown. To these writers copyright is denied by the new act. "Lorna Doone" and Tennyson's poems are good examples of valuable books too little appreciated on their first appearance to make them of commercial value on both sides of the Atlantic, but ultimately gaining an influence over the public which demonstrated their great inherent merits.

We are therefore led to expect that popular books by popular authors will not be much affected by this legislation, that books by writers not so well known will be produced in the

United States and supplied to the English market from there, and that books by unknown authors will fail to gain the advantage of the American copyright so indirectly offered to them.

Another point deserves consideration. It is that since the United States market is the larger and more difficult market to supply, United States publishers will compete with English publishers for popular copyrights with great advantage, because they can, if they will, offer the author higher remuneration. Authers, in the first instance, will profit by this condition of things, but it will lead to a more intimate connexion between the publishers in the two countries, and no publisher of miscellaneous books on either side of the Atlantic will be able to conduct his business to the greatest advantage unless he has an agency or unites himself with a publisher on the other side. not be a disadvantage-indeed, I am inclined to regard it as the reverse: but its tendency must be to throw the great bulk of the business into few hands, and this will tend towards monopoly and diminish competition. It will also, as I remarked above, promote the gravitation of publishing towards the larger market, which from the extent and population of the country must be in the United States.

It is not to be expected that British printers and book manufacturers will regard this result as satisfactory. Most naturally they will make efforts to hold their own position, and may invoke the aid of the British government to avert the injurious consequences they fear. They may well plead that, though able to compete commercially with the printers in any other country, they are powerless in the face of such an enormous American bounty, and they may point out that as they can supply the English market cheaper than their competitors, they are justified in asking the British government to prohibit the privilege of copyright in Great Britain to all books produced in countries not belonging to the Copyright Union. This would compel the English copyright owner to print all books for the English market within the Copyright Union. Or, on the other hand, they might ask for the repeal of the prohibition against importation into England of editions produced outside the Union, and this would be equally effective, for it would compel the copyright owner

to elect whether he would allow cheap United States editions to be imported to compete with his own higher-priced English editions, which would be fatal to them, or arrange to prevent their importation and supply the market himself with editions produced here. If either of these courses were taken, the English author would be able to secure copyright in both countries, but at the same time the English printer would escape from the blow meditated against his industry.

Either of these courses might be regarded per se as retrograde, but the printers could plead that they were advocated as a means to an end, and that the United States would have it in its power to terminate the effect of them at any time by eliminating the manufacturing clauses from its copyright law and joining the Copyright Union, and thus allowing the making of books to revert to its natural channels.

We can hardly wonder that the British printer feels aggrieved when we bear in mind the very easy terms on which an American author has hitherto been allowed to obtain copyright in England, carrying with it the advantages of copyright throughout the whole of the Copyright Union. The sole condition practically is that the book shall be published first or simultaneously in the British dominions, for the condition that the author shall at the time of publication of the work reside within the British dominions has become obsolete in practice even if ever required by British law. Even the publishing required has been held to be satisfied by the offering of a few copies for sale—not the production, or even the importation, of an edition for the market.

Will this new act affect the public? In the United States it will very materially curtail, though not extinguish, unauthorized reprints, and slightly but only gradually raise the price of books. If this extra price ever becomes burdensome to readers there, they will be able to bear in mind that much of it is due to monopoly in the manufacture of the book, and can so far be remedied by abolishing the manufacturing clauses in the act. In Great Britain its effects must depend on whether legislation of the character described above takes place or whether the American act is allowed to run its course unimpeded. If the latter takes

place, it is very probable that its effect on the prices of books will be inappreciable, except perhaps in a diminution in the number of novels in three volumes. If Her Majesty's Government are induced to insist that copyright books shall be manufactured within the Copyright Union no change would take place, and books would be issued and sold as at present; but if United States editions were admitted into this market without the author's consent, on the plea that they were lawfully printed editions and ought not to be restricted by him in circulation, the price of new popular light reading would for the time being be lowered, and remain so until the market was adjusted to its altered circumstances. On the whole, therefore, there is reason to believe that the English public will be benefited by this reduction or practically unaffected. Neither will the public in the continental states of Europe be influenced by the act. The differences of language partly account for this result, but it is also due in some measure to the fact that the mode of distribution in those countries is more nearly allied to that adopted in the United States. It is not identical by any means, but similar in many respects. Again, the tone of thought and mode of treatment of subject is a barrier to the literature in any of these countries becoming popular in the United States, except in the form of a translation of an interesting novel or an important biography, history, or book of travels, and such works are already utilized there.

It is necessary, however, to bear in mind that besides the classes of literature in England referred to above, there are several peculiar to the country and quite unaffected by this act. Such are school books specially produced for the curriculum of study in vogue in England, and quite unsuitable for American schools or colleges; books local in character and only of local interest; and many minor works and periodicals which cannot wait for typesetting three thousand miles off, but must be produced whilst the subject is fresh in the public mind.

Let us now glance at a few of the difficulties created by the peculiar character of this act. Many novels, stories not published complete, and continuous articles appear in the English periodicals. If the United States Government had joined the

Copyright Union, the author's property in these writings would have been duly protected by law, as in the leading countries of Europe; but how do they now stand as to their chance of obtaining American copyright? Any American printer or publisher may take them and reprint them for his own benefit, unless the author, "on or before the day of publication in this or any foreign country, deliver to the Librarian of Congress at Washington, or deposit in the mail within the United States, a printed copy of the title," etc. Since the periodical is not copyrighted in the United States, its contents cannot be copyrighted unless each article requiring copyright is registered as above. Moreover, an author must remit to the Librarian of Congress a fee of one dollar (an American has to pay only fifty cents) for recording this title, but his troubles do not end here. He must set up in the United States and bring out his articles at the latest simultaneously with the final article of the series in England. Is not this a very cumbrous way of granting copyright? Many an author will be debarred by the trouble entailed, and his book will ultimately appear in the United States as uncopyrighted. Is this intended? Again, even if the author does take all these necessary steps, is his property safe? I am afraid not. What is to hinder an American newspaper or periodical from using, without payment to the author, each installment as it appears in England, and, if the work should be specially interesting, writing a final chapter so as to end the tale suitably? This has been done, and may be done again, notwithstanding the new act. Again, could Macaulay's "Essays" have been copyrighted under this act? Certainly not. Could the valuable treatises which have appeared in the "Encyclopædia Britannica," such as "Maurice on the Art of War"? Not unless the encyclopædia was set up in type in the United States. Now, the setting in type depends on the publisher, but the injury arising from his not doing so falls on the author, and he is powerless, for under British law he is not able, except by special contract, to bring out his work separately till after the expiration of twenty-eight years, yet his loss is real. Arnold's "History of Rome," which originally appeared in the "Encyclopædia Metropolitana," became afterwards, by separate publication, a very valuable property. Another difficulty

arising out of this act is that the author is obliged to negotiate for publication with a publisher three thousand miles off, and yet if he fails to complete an arrangement he is muleted in loss of copyright. In all other countries in which literature is valued the author obtains copyright by the fact of publishing in any one of them. Is it right that he should be debarred from this advantage by the above-mentioned and numerous other minor difficulties? One can hardly believe that the effects of this act have been sufficiently examined by Congress in Washington, and therefore it is legitimate to cherish a hope that at some early period these impediments and incongruities will be removed.

Neither does it seem probable that lithographic drawings and photographs have received the attention they deserve. It is enacted that all photographic or lithographic drawings must be from "negatives or drawings on stone made within the limits of the United States." Will it conduce to the advancement of art to insist that all photographs taken by travellers in foreign countries, of scenery or public buildings, or sculpture, or paintings, and all portraits similarly taken, shall be re-photographed in the United States before they can obtain copyright? Will it be desirable to filter lithographic drawings of the finest frescoes on the coloured ceilings in the Vatican at Rome, or any of the other exquisite designs met with in Europe, through the manipulative touches of those who have never seen the originals? Surely not. The slight gain to United States labour can never compensate for the artistic deterioration inevitable from this requirement. Neither is it consistent with itself in excepting engravings and etchings; for a map of the United States, or Great Britain, or France, engraved on steel or copper, can obtain the full benefit of copyright by complying with the legal requirements, but the same map drawn on stone would not obtain this advantage unless it was redrawn in the United States.

How will the last section of the act (Section 13) affect Europe? Copyright is to be granted "to the citizen or subject of a foreign state" only "when such state gives copyright to United States citizens on substantially the same basis as to its own citizens." Practically all European states of literary importance already grant these privileges, and it rests with the United States author

to accept or to refuse them; therefore in this respect the act is inoperative.

But a second case is included in the same section—that in which "a foreign nation is a party to an international agreement, which provides for reciprocity in the granting of copyright, by the terms of which agreement the United States may at its pleasure become a party to such agreement." This condition is obscure. Does it mean an agreement to which the United States may become a party subject to its present legislation; or does it mean an agreement to which the United States can adapt itself by legislation or otherwise? If the former, as it is excluded from the Berne convention, I fear it must rely on any special agreement it can induce any nation to make. And here we must bear in mind that as its present legislation is repugnant to the Berne convention, all countries included in that convention are debarred from entering into such an agreement. If the latter, of course it can at any time alter its legislation and join the Copyright Union, and I am sure it would be heartily welcomed by all those countries which are already members.

Before concluding, I embrace the opportunity to draw attention to the different bases on which copyright stands in different In most of the states on the continent of Europe it depends upon citizenship, but in England it has always been conditional on first publication, and the United States has practically in its new act adopted that basis. It is certainly more cosmopolitan and commercial, and whereas the basis of citizenship fosters the idea that the law is made for the benefit of authors, the basis of first publication emphasises the fact that the benefit of the public is the lawmaker's first consideration. On the latter principle uniformity and universality of copyright law will be most easily constructed. The author will learn that the protection of his property follows him wherever he may be, and yet he is reminded that such protection is not unconditional, but dependent on his allowing his protectors the benefit of his writings.

In this brief survey I have very freely expressed opinions which may not command universal assent, and I have not hesitated to point out defects and what appear to me to be unsound

principles, but I hope I may plead in extenuation of this boldness my great interest in the subject. It is a subject which excites interest in but few and one which cannot raise a popular ery, but it is also one whose influence pervades every household. It influences religion, politics, science, art, and every-day life. Little does the casual reader reflect that his newspaper, his novel, or his special study depends on copyright. Without it society could not progress, the masterpieces of the educated brain would not be forthcoming for the delight or instruction of the world. Far from being opposed to the framers of the new American measure, I recognize that by it they have strengthened copyright as a property, and desire to thank them for their arduous efforts in promoting this valuable result. It encourages the feeling that a universal copyright law for the civilized world is within measurable distance, and I hope they will not relax their efforts until this desirable consummation has been achieved.

F. R. DALDY.

## FINANCIAL.

#### THE NEED OF AN ELASTIC CURRENCY.

THE times are out of joint in the eyes of those who see others with large bank accounts and plethoric purses, while they themselves are left in want. The social order is blamed to some extent for this inequality, but the remedy usually suggested is special legislation which shall in some mysterious way limit the acquisitions of the prosperous and turn a portion of the tide of wealth into channels now painfully empty. The chronic grumbler believes that if he could have control of the law-making power for one brief season he could straighten the crooked ways by which he has suffered, and secure for himself the supply which adverse fortune has thus far denied him. This is the common error of those who are forever clamoring for some act of Congress that will relieve them from the pressure of this wide-spread want. Their great need, as they understand it, is more money; and they see no reason why a larger share should not be awarded to them. The object of their greed, by whatever name it is described, cannot be created by law. Wealth is the product of labor; and, if every storehouse in the world were filled with coin, no more of it would find its way into empty pockets unless the owners of the pockets had something to offer in exchange for it.

As far as currency is concerned, it requires but very little for the business of the world. In civilized communities, especially in populous cities, and among the marts of trade, the bulk of the payments are made by transfers of credit. There is not currency enough in the United States to meet two weeks' payments in the city of New York alone, where from one to two hundred million dollars a day of paper vouchers pass through the clearing house. When the retail trade is a little more active than usual a larger volume of currency is required for payments made over the counter, but the needs for this purpose are much more limited than is commonly supposed. The annual movement of crops in the interior does require an increased volume of currency that may pass from hand to hand. In the city the payments of each day go back into the hands of the banks for re-issue, but in the country the receiver keeps the money, for a while at least, in his pocket, and hence a larger supply is a matter of prime necessity.

The one great fault of our present monetary system is the absence of all provision for this emergency. The currency is not elastic in any sense. The existing quantity may be transferred from one section to another, but there is no way of increasing the bulk when it is needed, or of allowing the volume to shrink by a natural process when it is redundant. When a large amount is gathered up at the financial centres for use in the outer districts, there is always a pressure and a disturbance seriously affecting the market, and this periodical excitement cannot in any way be relieved without changing the character of the currency.

A banking system which should permit issues of notes on credit would exactly meet the difficulty. The currency would increase as commerce demanded and shrink when the need abated by the operation of a natural law that would work without friction or violence. The sub-treasury project of the farmers would not answer the purpose. The currency loaned by the government on real estate would be an investment; and the loans on produce would not, like bank issues against drafts for the purchase of the crops, be returned when the movement was effected. They would be issues on warehouse receipts with little of the elastic quality about them. Besides, it would not help the farmers to enable them to store up and hold their produce. No farmer, save in some exceptional cases, was ever benefited by clinging to his crops. A thorough examination of the conditions will show that the producer who sells the yield of his estate the moment it is ready for market will be richer in the long run than the one who is able to hoard his products in the hope of higher prices. A study of the question by the writer from actual observation for more than half a century has established this as a fact that cannot be disputed.

The man who wants more money will find no royal road to the wealth he covets, no patent method for its acquisition. He must give something for it to make it honestly his own, and the man who sets himself earnestly to do this will find that all financial systems will bend to his conquering will. The gambler, whether he plays his game in the exchange, at a faro table, in a policy shop, or with smaller stakes in private circles at baccarat and progressive euchre, will find the issue precarious and unrewarding. The way to get more money without any loss of peace or self-respect is to earn it by toil of brain or sinew, and the funds thus acquired have no gnawing teeth. All other wealth eats like a canker.

David M. Stone.

# NATIONAL BANK EMBEZZLEMENTS—THE MANY-ROOFED BANK.

The national bank frauds recently unearthed at Philadelphia afford a particularly depressing study, more especially when taken in conjunction with those which have preceded them within the past few years: because not only do they reveal the existence of boundless opportunities for theft, but they establish, in addition, the utter inefficiency of the only means which it is possible for the government to employ to check or to prevent fraud, when once the honesty of the bank official has surrendered.

Buring the nine years ending with 1886, there were 55 separate cases of defalcation in national banks, amounting in all to \$9,959,741, and they were divided as follows among the responsible officers of the banks: 14 presidents, total embezzlement, \$5,184,569, average for each individual, \$370,326; 21 cashiers, total, \$3,798,000, average, \$180,857; 9 tellers, \$462,000, average, \$51,000; and 11 sundry officers, \$515,172, average, \$46,833. These represented direct frauds.

There are, unfortunately, no available data of the embezzlements reported subsequently, except in cases where they caused the wreck of the institutions in which they occurred; but I find, on investigation, that of the 27 national bank failures which took place during the four years following 1886, twelve were due to frauds by bank officials, while eleven were attributable to excessive loans to bank officers, two to bad management, and two to decay of trade. The figures of these thirteen years will be found to be sufficiently gloomy, but the current year bids fair to raise the dismal average.

In one of his reports the comptroller drew attention to the fact that only a fraction over three per cent. of the national banks organized since 1863 had been placed in the hands of receivers. With reference to this it may be said that the average losses from national banks are known to be very small. It is not, however, the average loss to the community that is disturbing the public mind, but the absolute ruin entailed on nearly all the banks victimized by fraudulent officials, the impunity with which such frauds are committed, the apparent impossibility of devising any means to prevent them, and the general uncertainty as to the safety of institutions, since some of those commonly esteemed to be the safest have proved to be the most corrupt in their management.

Through the courtesy of the comptroller, I have before me a copy of the printed blank upon which the national bank examiners make their reports. I have gone through it carefully; and, while it is admirably designed to afford a record of a bank's condition at the time of the inspection, it is certainly not, in itself, calculated to lead to the discovery of any well-planned fraud; or, in fact, to do much more than it was, to all appearance, originally designed to do, namely, to see that certain governmental regulations are complied with.

The late comptroller, Mr. Trenholm, as a matter of fact, repudiated the idea that his examiners should be able to discover the defalcations which presidents and directors themselves had failed to trace. His functions, he explained, were to see that the bank was properly organized and administered; that no law had been violated in respect to loans, reserves, investments, bad debts, or dividends; and that the assets were really worth the amounts representing them on the books of the bank. In fact, in his annual report for 1887, he accentuated his repudiation of any such liability by scornfully remarking: "No one of practical experience would rely upon an examiner who comes only once a year and who can afford to stay but a single day, to discover thefts

or false entries that have been successfully concealed from directors who are always present and whose money is being stolen. All efforts must be futile that are directed to supplying, by means of official examination, an effective substitute for the vigilance and personal accountability of directors."

The present comptroller, Mr. Lacey, is apparently disposed to assume a greater responsibility. In his report for 1889 he said: "The chief officers of a banking association transacting an extended business are, in a large degree, prevented from personally supervising all the multifarious details which are necessary to the conduct of the business of our larger institutions. The presence, therefore, of the examiner, aided by competent assistants, is very welcome to the officers responsible for the safety of the great interests committed to their care. . . . The details of every branch are brought simultaneously under the scrutiny of experts." To a lack of clearness as to the meaning of Section 5,240 of the Revised Statutes of the United States must be ascribed these different views of these officers.

There is a defect in the national banking system which insists on the maintenance of thousands of small isolated banks, instead of permitting the establishment of large banks with branches radiating in all directions from a central office-within a limit of, say, one day's journey, or 500 miles, in which the examination could be continuous and efficient, being, so far as the branches are concerned, conducted by the parent bank itself. The experience of other countries has demonstrated that, for all purposes of safety and convenience, this kind of many-roofed establishment is the best. Its system of examination is entirely automatic, and is conducted by an efficient corps of examiners at the head office of its establishment. These examiners do not depend upon yearly visits for keeping the branches in order. From daily official letters between each branch and the central office, from weekly returns of the most exhaustive description, and from previous visits and reports, the inspectors become familiarized with the business of each branch, and the training of a life-time gives them an incredible power of memory and marvellous instincts for the discovery of any irregularities. It is the perfection of inspection. It goes on without intermission, yet unharassingly, since it is the acknowledged custom.

Prior to its adoption, English banks suffered cruelly from defalcations, much as this country does now; since its perfection thirty years ago, the great joint-stock banks with chief offices in London and with aggregate deposits of \$1,000,000,000, have not suffered an appreciable loss through the dishonesty of their employees. Could anything be said more in favor of the system? Yet some of these banks are of the most colossal magnitude. The London and County Bank, for instance, has 172 branches, while the National Provincial Bank has 164 branches, and their combined assets are in the neighborhood of \$400,000,000. It is probably safe to say that the officers of these banks are not more honest than the same class in this country, for the average

American banking official yields to none in point of sterling integrity; but what they lack is opportunity and temptation to defraud, and what they possess is the most rigid discipline.

The branch system prevails not only in England but in Scotland (where there are seven banks possessing upward of a hundred branches or agencies apiece) as well as in Australia, Canada, and other British possessions. Under it, the banks flourish, the present average market value of banking capital in England being 210 per cent. premium, that of Scotland 157 per cent., and that of Ireland 161 per cent.; while there are in Australia banks which pay 25 per cent. on \$3,000,000 capital, 17½ per cent. on \$6,250,000, and on \$6,000,000, while others pay dividends of 14, 15, 17½, and 22½ per cent., respectively, on large paid-up capitals. These banks do well not only for themselves but for the country of their location, whose credit and commerce they improve and develop enormously.

When the branch system was first introduced in England 60 years ago, the country was covered by private banks, which met the requirements of the public fully as well as the national banks meet our own necessities to-day. The public had abundant confidence in these banks in which their fathers and grandfathers had believed in as in a creed. They seemed imperishable, but they stood as the national banks stand to-day—mere local units, without cohesion or combination—and they experienced the fate of all such when fighting against powerful federated action. They have been swallowed up almost absolutely by the large branched establishments, and the result is undoubtedly the survival of the fittest.

What I would venture to suggest for this country is the legalization of some system of amalgamation, whereby national banks, within certain areas, should weld themselves together, so that, instead of having 3,500 solitary institutions, as we have now, all more or less exposed, we should have, say, 50 large banks, with from 50 to 100 branches each, radiating from our chief cities throughout the country.

The central offices of these amalgamated banks might be relied upon to see that the branches were properly examined (there has never been any trouble in other countries about this), while the government examiners, the clearing house committees of the cities where the chief establishments were located and, as in Great Britain, some firms of reputable auditors, could make a crucial investigation of the affairs of the head offices semi-annually. Such a change would involve no dislocation or displacement of staff, and need wound no amour propre; for the president of a small bank would not find his dignity curtailed by translation from his presidency to the management of a great and powerful institution.

The advantages of banks with branches are too numerous to be detailed at length here. Prominent among them, however, may be mentioned the fact that the smallest branch has all the strength of the parent institution, and that no local convulsion has the power to injure

the branch. Apropos of this, it may be said that there are banks today in Great Britain which could lose the entire assets of a dozen of their branches, not only without closing a branch door, but without

passing a dividend.

The methods of inspection employed in such banks prevent defalcation and bad banking, while in times of panic a bank with a number of branches all situated within a day's journey of the head office and therefore within timely reach of help, finds it essential to keep only a fraction of the cash on hand which the same number of isolated establishments would consider necessary to their existence.

Such banks do not become monopolies; on the contrary, they are foils to monopoly, for in practice it is found that wherever the branch of one institution is established, a rival office is prompt to put in an appearance. This maintains a healthy competition, while the system itself acts as a check upon the formation of small banks whose size and irresponsibility are a danger to the community, and whose desperate struggle for the means of existence degrades the profession of banking. Such banks, too, tend to the creation of an excellent class of employees. These come into the bank as youths, and as they are thus familiarized with the handling of money from their earliest age, there is little temptation to take what does not belong to them.

Much more might be written in favor of the branch or many-roofed bank, but probably enough has been said to show how vastly the potentiality of the existing national banks might be increased by their being brought into such a system. No one wishes to see our national banks supplanted, or a single officer of them displaced, but the requirements of the country imperatively demand a change in the direction indicated, and it would be greatly to the profit of every bank stockholder were such instituted.

J. SELWIN TAIT.

# ESTIMATES OF NEW BOOKS.

Political.—The American Citizen (D. C. Heath & Co.) by Charles F. Dole, is a compact handbook which is designed to interest youth in the duties of citizenship and in the functions of government as they touch daily life. Starting with the type of government which exists in a well-regulated home, the necessity for authority, obedience, and cooperation in all the relations of life is most entertainingly developed. The book is an excellent preparation for more advanced treatises like John Fiske's "Civil Government in the United States" and Woodrow Wilson's "The State."—The practical application of right principles to citizenship is most clearly shown in the life of that great American who learned its rights and duties by direct contact with the people in the hardships of western pioneer life. Abraham Lincoln, the Liberator (Funk & Wagnalls) by Charles Wallace French, sets forth the main facts of that life in the clear, colorless manner which characterizes so many volumes which are compiled to order for a series. This one belongs to the "American Reformers" series, and has no other reason for being.—Henry Cabot Lodge has also been called upon to contribute to a series (that on "Historic Towns," which has so far consisted of nine English cities and one American city). His volume on Boston (Longmans) is less perfunctory than the usual work in this line, because he has heretofore written on aspects of the subject, and has long saturated himself with the history of the period. The bulk of the volume is taken up with the colonial and revolutionary history of Boston, and is particularly entertaining in describing the great social changes in that city which the Tory exodus wrought. Like Brooks Adams, this son of the Puritans is peculiarly alert to the intolerance of his ancestors.— Political history in another field, but one which Americans have of recent years watched almost as closely as their own, is represented by the new edition of T. P. O'Connor's summary of The Parnell Movement (Cassell), first issued in 1884. It is well-known as a vigorous ex-parte statement of the case. The new edition contains a biographical sketch of unlimited eulogy by Thomas Nelson Page, and an appendix of three pages which puts the author in thorough accord with Justin Mc Carthy's leadership, and predicts "the speedy triumph of the cause of Home Rule."

TRAVEL.—A Flying Trip Around the World (Harpers), by Elizabeth Bisland, is the outcome of a rather juvenile bit of advertising in which two women became the racers which the world was expected to watch. Because Miss Bisland is a woman of refined instincts and

quick observation, her book is of more permanent value than its object would lead one to expect. She has an eye for color and picturesqueness, and is evidently a healthy and adaptable traveller who makes light of discomforts. She photographs the things which are "different," and lets the reader infer what is a matter of course. She is too impressionable, perhaps, and shows her delight with an enthusiasm that often lacks discrimination. --- Another volume of "rapid" travel writing is Thomas Stevens's Through Russia on a Mustana (Cassell). It sketches a ride of 1,100 miles through the heart of Russia. from Moscow to Nijni Novgorod, and is entirely journalistic in its methods. An editor would call it "good copy" for a Sunday edition, and a reader would find in it amusement, but very little research or wise reflection. A chapter describing a day with Tolstoï is valuable especially for the matter-of-fact tone of it. Mr. Stevens is not a heroworshipper, but an experienced observer of men.—Charles Dudley Warner is a traveller of a different sort, combining the methods of a literary man with the practical eye of an editor. Our Italy (Harpers) is his epitome of California-written with admiration for its beauties, but conservative in its estimate of commercial advantages. His idea is that there is so much of undoubted worth in California that there is no need to use exaggerations for literary effect. What he has to say of the orange, raisin, and wine industries is, therefore, of particular weight. - When William Winter travels it is as a man of poetic temperament who lives in a literary atmosphere where the most real personages are creatures of the fancy of other men. His Gray Days and Gold (Macmillan) is a collection of sentimental travel sketches of wanderings in England and Scotland, with Moore, Wordsworth, Shakespeare, Byron, Johnson, and Scott as literary ghosts to haunt his dreams in many places.

FICTION.—This is the publication season for "summer fiction," and it is notable that there is hardly an elaborate, full-fledged novel in the lot. Most of the volumes are reprints of magazine short stories, and novelettes of two or three hundred pages-convenient volumes for a short car-ride or a rainy afternoon in camp. There is one marked exception—the novel Jerry (Holt), by Sarah Barnwell Elliott, which is a bulky volume with all the machinery of "parts," poetical chapter headings, and the free use of rhetorical periods which marks the conventional English romance in three volumes. The popular strength of this muchpraised story lies in its emotional intensity and sympathetic style. Its artistic weakness is displayed in the entirely feminine (and heroic) interpretation of the character of Jerry, whose very existence in the situations created for him would depend on intense masculinity. That the author brought him to complete disaster at the last, when so near success, would show, perhaps, that she is artistically consistent, at any rate.—The other way of writing the romance of the humble is shown in J. M. Barrie's sketches of old Scotch village life—A Window in Thrums and Auld Licht ldylls (Cassell). There is not a touch of the

"heroic" in this author's methods. The wonderful effects of realism are wrought by simplicity and depth of feeling—not by endowing plain people with the complex emotions of artificial civilization. The pathos and humor are of the quiet kind which appeal strongly to people of taste.—Something of the same simplicity is found in Mary E. Wilkins's A New England Nun (Harpers)—though the charm of style is not the equal of Mr. Barrie's. The women who read will, however, prefer Miss Wilkins's way of looking at life and character, which is entirely domestic and provincial.—Two novelettes have appeared, almost simultaneously, with old Virginia gentlemen as prominent characters. On Newfound River (Scribners), by Thomas Nelson Page, is a plantation story of the times before the war, which, in spite of its conventionally romantic plot, is entertaining. Mr. Page's sentiment and poetic feeling step in to save his story where his invention fails him. —F. Hopkinson Smith's Colonel Carter of Cartersville (Houghton) has long been a familiar character in New York where the author has found the story grow upon his hands as he told and retold its episodes to audiences of friends. This story is in strong constrast to Mr. Page's. as it transfers an "old Virginia gentleman" from his plantation to the new conditions of modern New York.—The South is also represented in recent fiction by Joel Chandler Harris's Balaam and His Masters (Houghton)—a series of sketches depicting negro and cracker life in Georgia. They show the author's usual grasp of the eccentricities of character, and very original literary methods—with a lack of invention and constructive power.—Among humorous fictions of the month is A Box of Monkeys and other Farce Comedies (Harpers), by Grace Livingston Furniss, which contains four little plays well-adapted for parlor theatricals. They are full of that sort of exaggeration which is necessary for "fun" in domestic entertainments, where the performers are not usually artists in method. Some of the characters are needlessly idiotic and vulgar, even for a farce-comedy. ——Frank R. Stockton's Rudder Grangers Abroad is humor of a more delicate kind, the essence of which is paradox—if one may invert the definition of paradox to read "something seemingly true yet absurd in fact."—F. Anstey (author of "Vice Versâ") is surely an own literary cousin to Stockton and one might well imagine Stockton to have invented the fanciful conceit on which is built Tourmalin's Time Cheques (Appleton). English author has also the American's placid, unconscious style for narrating the most absurd things. One is apt to weary of their methods if one reads them at long sittings. They suggest a whole dinner of nothing but consommé. — Jerome K. Jerome has some literary kinship with Mark Twain, but so far removed that the American humorist would hardly claim it. Mr. Jerome's Diary of a Pilgrimage (Holt) is a dilution of the sort of thing that a good while ago delighted people with Innocents Abroad. We like another kind now, and the absurdities of a block-head travelling in a strange country seem a very common sort of humor.

MISCELIANEOUS. - Younger American Poets, 1830-1890 (Cassell) is a compilation by Douglas Sladen which is fairly representative, though there is no perspective whatever in the number of pages allotted to the authors of varied accomplishments. It is a piece of book-making for which there is no particular reason, and Mr. Sladen's solemn and grotesque introduction furnishes none-except, possibly, the vanity which likes to associate its name with people of talent. To meet a demand for a concise biography of that eminent preacher, the publishers have issued in a separate volume John R. Howard's study of Henry Ward Beecher (Fords, Howard & Hulbert) originally published in 1887 as a preface to his "Patriotic Addresses."—Among useful Translations should be noted Jessie P. Frothingham's version of the Journal of Maurice de Guérin (Dodd, Mead & Co.)—a well-printed volume which includes Sainte-Beuve's Memoir of the author.——In the admirable series of translations of the popular historical works of Imbert de Saint-Amand the latest volume is Marie Louise; the Island of Elba, and the Hundred Days (Scribner's). Elizabeth Gilbert Martin is the competent translator.—Porter Sherman, a student of economics, has translated from the German Dr. Lujo Brentano's valuable work on The Relation of Labor to the Law of To-day (Putnams)—an abridgment of the same author's authoritative book on "Labor Guilds," The translator was a pupil of Dr. Brentano, and this work is made with his hearty approval.

# HISTORY, BIOGRAPHY, TRAVEL, AND ESSAYS.

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# WRITERS IN THE JULY FORUM.

PROF. FRIEDRICH HEINRICH GEFFCKEN (born in Hamburg, 1830) is professor *emeritus* of international law in the University of Strasburg and an Imperial Privy Councillor. He has taken an active part in German politics and journalism and is the author, among other books, of "State and Church;" "Socialism;" "The Question of the Danube;" and "The Papacy."

GEN. FRANCIS AMASA WALKER (born in Boston, 1840) fought in the civil war, gaining the brevet of brigadier-general. In 1870 and 1880 he was superintendent of the census. In 1881 he became president of

the Massachusetts Institute of Technology.

PROF. HERBERT BAXTER ADAMS (born in Amherst, Mass., 1850) is professor of history in Johns Hopkins University and secretary of the American Economic Association. He has been active in the University Extension movement.

MR. ALDACE F. WALKER was formerly a member of the Interstate Commerce Commission, and is now one of the commissioners of the

Western Traffic Association, at Chicago.

Mr. OSWALD OTTENDORFER (born in Zwittau, Moravia, 1826) was educated in Vienna, participated in the revolutionary movements of 1848, and on their failure came to this country, where he became editor of the *Staats-Zeitung* and has been active as a reformer and philanthropist.

THE HON. CHARLES STEBBINS FAIRCHILD (born in Cazenovia, N. Y., 1842) graduated at Harvard in 1863, and entered the law. He was Secretary of the Treasury in Mr. Cleveland's cabinet, and is now presi-

dent of the New York Security and Trust Company.

GEN. THOMAS JORDAN (born in Virginia, 1819) graduated at West Point in 1840, became a brigadier-general in the Confederate army, and after the war was commander-in-chief of the Cuban insurgents, in the attempted revolution of 1870. He is now editor of the New York "Mining Record."

PHILIP GILBERT HAMERTON is an English artist and man of letters who has spent a large part of his life among the French people, whom he knows thoroughly. He lives at Autun, France.

MR. F. R. Daldy is secretary of the Copyright Association, the most influential body of the kind in Great Britain. He attended the Berne copyright convention by special invitation.

MR. DAVID M. STONE (born in Oxford, Conn., 1817) is the editor of

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Mr. J. Selwin Tait was reared in English banking circles, and since coming to this country has written much on financial subjects.

# The Forum.

# **AUGUST, 1891.**

## RUSSIAN FINANCE: A BAD INVESTMENT.

THE recent failure of the Russian loan—for such is its indefinite postponement—has directed general attention to the condition of Russian finances, and it is but natural that it should do so. Prince Bismarck was much blamed when, some years ago, he undertook a financial campaign against Russia, forbidding the Imperial German Bank to make advances upon Russian bonds; and we think this blame was deserved, for the measure did not tend to protect German capitalists against losses arising from the possession of such securities, but on the contrary inflicted considerable losses upon many of them, who, being frightened by the chancellor's prohibition, sold their bonds at a heavy discount. It was evident that the action of Bismarck, who several years before had floated a Russian loan by a governmental institution of credit, the "Seehandlung," was prompted by merely political reasons. He wanted to show Russia, with whom he was discontented, that he was able to damage her credit; but even this purpose was not attained. The measure, indeed, caused much bitterness in Russia and stirred up the enmity of the Panslavists against Germany, but it did not make the Russian government more pliant; an empire of 100,000,000 inhabitants may be irritated by such "coups d'épingle," but it can be checkmated only by blows, attacking its vital forces.

The measure, therefore, dictated by rancor, was an unwise one, but the question whether the Russian finances are in a satisfactory condition is a very different one. It might be presumed that they are so, judging by the rise of the rate of exchange of the rouble and of Russian securities, and by the apparently successful conversion of Russian loans. I maintain, however, that to believe this would be a great error, and in order to prove my assertion I shall venture to give some idea of the economical position of the great eastern empire.

From 1872 till 1882 Russia nearly doubled her debts, and the deficit, which in the preceding ten years was 110,000,000 roubles, has risen in the following decade to 240,000,000, the expenses being 40 per cent. larger than the income. This deficit was covered by increased taxation, by foreign loans to the amount of £164,500,000 sterling, by internal loans of about 2.600,000,000 roubles, and by the issue of 915,000,000 of inconvertible paper money. The five-per-cent. foreign loans were issued at the average rate of a little more than 82; the rate of interest was nominally 4.62 per cent., but in relation to the sum received in specie 5.66 per cent. Looking back a little further, we find that the foreign debt of Russia payable in gold was, in 1842, £6,000,000; in 1852, £12,000,000; in 1862, £41,000,000;in 1872, £105,000,000; and in 1882, £189,000,000. The internal debt had risen within this period from 230 million roubles to respectively 610, 990, 1,330, and 2,730 million roubles. Now it would be an error to assume that the larger part of these debts were incurred for internal purposes. The railways existing in 1882 cost 2,620 millions, of which the government paid half, so that it was in possession of 1,320 millions of shares and bonds and moreover paid 210 millions a year to shareholders as a guarantee and 25 millions for telegraphs; the remainder was expended for unproductive purposes, mostly military ones. Since 1882 the debt has been continually increasing. In 1883 there were issued six-per-cent. gold rentes to the amount of 50,000.000 roubles; in 1884, 20,000,000 in gold and 84,000,000 in paper; in 1887, 96,000,000; and in 1889 a metallic loan of 125,000,000, besides 100,000,000 for railways, so that in the budget of 1890, amounting to 888,800,000 roubles, 266,146,192 were absorbed by the public debt, while the inconvertible paper money amounted to 1,044,295,384 roubles, of which only 211,-472,495 were covered by a metallic reserve.

In that year the total of the public debt was:

Metallic roubles,	955,174,161
Paper roubles,	3,021,504,190
Dutch florins,	
Pounds sterling,	
Francs,	

Setting aside the above-mentioned 266 millions for interest and sinking fund for the debt, the army and navy absorb about 260 millions (an enormous burden for a country in which 92 per cent. belong to the poorer classes), and the budget of 1889 closed with a deficit of 40 millions. Besides, it must be observed that in the published preparatory budgets the finance minister always overrates the income—as, for instance, in 1885 a considerable increase was assumed from a tax on the tents of the Turkoman tribes, a very questionable item of revenue—and that he likewise underrates the expenses, which are swollen every year by large supplementary credits.

It is now said that the present finance minister, Vishne-gradski, has effected a great amelioration, as is proved by the re-establishment of the equipoise in the budget, by the rise of the rate of exchange of the rouble and of Russian securities, and by the conversion of former loans. I admit that the minister has cut down the expenses so far as it was consistent with his staying in office, but as for the rest I maintain that the amelioration was purely illusory.

Let us first look at the conversion of loans, in regard to which the Russian and French press boast that the loan of 500,-000,000 francs of December 22, 1888, was covered two and one-half times; that of 700,000,000 francs of April 10, 1889, ten times; and that of 1,242,000,000, of June 5, 1889, eight times. Now, what is a conversion? It is simply an act by which the debtor gives to the creditor the alternative of being satisfied with a lower rate of interest or of taking back his capital. In this way Mr. Goschen converted the three-per-cent. consols into two-and-three-quarter per cents. and the German government its

four per cents. into three-and-one-half and three per cents. But it is a very different thing if the debtor, while reducing the rate of interest, enlarges the capital, or if he only extends the period of the sinking fund; and both have been done by Russia in her recent conversions. Take, for instance, that of 1888: loan in question was a loan at five per cent. of 81,300,000 roubles, which required 5,688,000 roubles for interest and sinking fund, and which would have been paid back in 25 years. the conversion at four per cent. the capital was increased from \$1,300,000 to 97,250,000 and the period of the sinking fund was extended from 25 to 81½ years. In the following loan a debt of 23,500,000 roubles at five per cent. was converted into a fourper-cent. loan of 27,834,000 roubles, to be extinguished only in 814 years. The total of such conversions shows that the capital of 508,500,000 roubles at five per cent. was exchanged for one of 582,644 000 roubles at four per cent.—an increase of 15 per cent. The reduction of interest is, in the first 25 years, 3,630,-477 roubles annually—in all 90,761,925—while for the ensuing 56 years 448,689,169 roubles more will have to be paid, for it is only in 1970 that the four-per-cent. loans will be paid back. is said that the shrewdest heads of Europe "put their money on Russia" and that the great Jewish financiers have not been frightened into refusing to float the newest loan because they disliked the security. But those financiers float a loan only in order to sell it to the public, who will be the ultimate losers, the devil taking the hindmost. It is very conceivable that French bankers were ready to conclude such loans, because they realized enormous profits by them, the commission which the Russian government paid being 1.573 per cent. for the first loan of 125,000,000, 2.85 per cent. for the second of 175,000,000, and 2.729 per cent. for the third of 310,498,000; but such conditions surely do not prove an amelioration of the Russian credit. the contrary, a government which consents to such terms shows that it is living from hand to mouth and must have money at any price. The increase of the custom duties payable in gold is another proof of this; they have heavily damaged Russian commerce, exports falling from 667,500,000 roubles in 1882 to 450,000,000 in 1886, imports from 527,500,000 to 379,750,000.

The profits of the prohibitive policy go to the Russian manufacturers, who realize enormous gains, but who, protected as they are against foreign competition, neglect all progress in production. Moreover, it is curious to observe that, as Mr. Lanin has pointed out in a recent number of the "Fortnightly Review," the greater part of these manufacturers are foreigners; in the first guild of the Moscow merchants less than half are Russian; of 232 export and commission houses of that city 192 are in the hands of foreigners. The cost of this system is entirely borne by the domestic consumers; when, for instance, some years ago foreign coal was heavily taxed, the Russian producers raised their prices enormously without making provision for a sufficient supply of coal. Coal was thus sold at fancy prices, so that many factories had to be shut up, notwithstanding the protection afforded to their manufactures. The premium accorded for exported sugar increased the produce sixty-eight fold, but by far the larger part went to foreign markets, which are flooded with cheap sugar. England and Persia pay for Russian sugar 350 per cent. less than the Russian consumer; so that Russian sugar, which has been growing inaccessible to the poorer classes, is now smuggled from Persia into Russia.

But it is agriculture which fares worst with this system. With the enormous duties on agricultural implements and machines, the few Russian manufacturers were unable to meet the demand; they could, for instance, furnish only 40 threshing machines of the 400 which were wanted, the rest had to be imported from Germany and England and 8,000,000 roubles in custom duties had to be paid for them. A plough of the ordinary kind costs in Germany 2.72 roubles, and in Russia, 5.30 roubles; while the import of scythes, which are not made in Russia, entails upon agriculture an average expenditure of 311,109 roubles in custom duties. Now Russia is, notwithstanding the manufactures fostered by protectionism, in the main an agricultural country. According to a report of the secretary of the English embassy, Mr. Kennedy, in 1885, the area occupied by corn rose in European Russia from 155,000,000 acres in 1872 to 167,-000,000 in 1879, but fell in 1883 to 136,000,000; the produce rose from 1,281,000,000 bushels to 1,498,000,000, but in 1883

went down to 701,000,000. The export remained the same, namely, 229,000,000 bushels—a fact which shows the impoverishment of the country. This condition has within later years become still more unfavorable, the export of corn having fallen from 427,000,000 bushels in 1888 to 352,000,000 in 1889.

If we consider that the spirit excise rests mainly on the poorer classes and that they bear the principal burden of the military conscription (12 men per square mile in a very thinly populated country) the pressure of the present system on the agricultural population becomes evident. But it supports also the heaviest part of direct taxation. In his report of 1885 Mr. Kennedy was of opinion that the limit of taxation was practically reached. He was right, according to sound principles, but Mr. Vishnegradski has understood how to squeeze out considerably more from the country, by applying the harshest measures for collecting arrears which seemed hopeless and by enforcing the payment of the present heavy taxes. In fact, it may be said that, notwithstanding its last good harvests, Russian agriculture is bankrupt. At the agrarian bank founded for the nobility, the arrears had risen in April, 1888, to 109,712,000 roubles. In order to cover these arrears the government issued a lottery loan, and yet 300 estates of the nobility are now to be sold by the bank for unpaid interest. This indebtedness may be ascribed to the prodigality with which the nobles are living, but the same cannot be said of the peasants, who are forced to borrow the money required for the payment of taxes at 100 per cent. from usurers. These usurers, who are not Jews but orthodox Christians, are also the retailers of brandy, and the government dares not meddle with them because the spirit-excise yields more than one third of the revenue-275,000,000 roubles, while the total expense for schools is only 25,000,000.

A fiscal system working in this way, for the present day only, in order to scrape together every available rouble, and which annihilates the sources of popular wealth, on which the soundness and the elasticity of the revenue repose, is short-sighted, and must inevitably lead to ruin, exactly as did the French fiscal policy at the end of the last century. And with all this, Russia follows continually an aggressive foreign policy,

menacing her neighbors by assembling large masses of troups on the frontiers and intriguing against the independence of the Balkan states, as has been shown in the late plot against Bulgarian ministers. On the other hand the internal misrule has become proverbial; corruption pervades the whole ill-paid bureaucracy, as has been proved most conspicuously in regard to the railway administration, the abuses of which have been lately demonstrated in a book by M. L. Kotlubay ("Zheleznodorozhny Mir'') which has caused the greatest sensation and has not been refuted. The author proves that the number of railway accidents in Russia is larger than in any other country and that this is mainly due to the negligence of the officials, who are overworked and underpaid. They try to make money by every means; in winter they pocket the wages destined for the workmen who remove the snow from the rails, and if a merchant wants to have his timber promptly forwarded, he has to bribe the principal agents, while factories are yearly paid for which merely exist on paper. The cause of this is the scanty pay of the officials; the directors have 1,200 roubles a month, while the porters get only from 20 to 40 roubles for a service of 24 hours. The main end of the shareholders is to declare large dividends, and those who suffer from this system are the travellers, who can never obtain any redress for their grievances.

There are, of course, railways connecting the great centres, which pay well, but most lines are worked at a loss, the distances being too great in a comparatively thinly populated country. Others have been built principally for strategical reasons, one of the most striking instances being the Transcaspian Railway. It is a wonderful specimen of engineering art, and as such will remain a lasting memorial of the genius of its constructor, General Annenkov, who, undaunted by the difficulties of laying rails in the shifting sands of the desert and of protecting the road when finally constructed, has pushed this line into the very heart of central Asia. But this railway, passing through thousands of miles of uncultivated land, inhabited only by nomads, cannot pay in our day. By it Russia has established her dominion in central Asia, but more than a century may pass before commerce will so far progress as to make it profitable.

The same may be said of the projected Siberian railway, which is destined to connect the border station, Tumen, with Vladivostok on the Pacific, that is to say, to stretch from the 60th to the 190th degree of eastern latitude. Apart from its enormous length the construction of this road will be very costly on account of the large rivers which will have to be bridged and the ranges of mountains which require to be pierced by numerous tunnels. Only the southern part of this enormous country, which covers more than 12,500,000 square kilometres, is fertile, and the whole population was estimated at 4.313.630 in 1885. Northern Siberia is rich in fur-bearing animals and in minerals, but the produce of the mines is scanty, and the distances from the projected railway are so great that it will probably be preferable to transport the merchandise by water and carriage as is done at present. The railway will, if finished, undoubtedly exercise a civilizing influence; but for generations to come it can only be worked at a heavy loss.

The same gross misgovernment to which we have alluded in the railway administration prevails in every other department and engenders general discontent, as is clearly shown by the continual plots of the Nihilists. I therefore come to the conclusion that a government reposing upon such a system is hollow and not a trustworthy debtor to which European capitalists may confide their money. At last the bubble has burst, and the halo with which Russian finances were surrounded has disappeared by the collapse of the last Russian loan. It was in itself preposterous to issue a three-per-cent. loan of 600,000,000 roubles at 84 for a country which is in the economical position which I have tried to explain, but it seems certain that this time the Rothschilds withdrew from bringing forward that loan on account of the cruelties committed against Russian Jews, in which, according to recent reports, the Czar persists under the pretence that Jews were involved in all the plots against his life. However that may be, the civilized world has approved the repugnance of the great banking-houses, for a general cry of horror has been raised at the atrocities with which the Russian Jews have been visited. These unfortunate people are, for the most part, a legacy of the partition of Poland, in which they certainly had no concern. They are kept together by the bonds of common religion and by their language, which is a mixture of gibberish German and Hebrew. As only a certain percentage of Jewish children are allowed in the national schools, it is natural that they should maintain their peculiarities. They are not allowed to be land-owners, or to till the soil as farmers. What then remained for the Jews but to turn to trade in its simplest form as middlemen? As such intermediaries they are indispensable in the sparsely populated country in order to bring together the producer and the purchaser.

After the partition of Poland the Empress Catherine II. made pales of settlement for the Jews, which at that time were sufficiently large, but have become far too small with the increase of the peculiarly prolific Jewish population, which in many towns outnumbers the orthodox inhabitants. So the Jews tried to obtain other means of livelihood by paying largely for the concessions. They can scarcely be blamed for this, as the authorities took their money, yet, though they are accused of pursuing only one profession, they are denounced as lawbreakers when they try to practise other trades. The authorities have now suddenly resolved to withdraw all the concessions which they themselves sold to the Jews and to enforce against them the old penal laws, forcing them to return to the old pales of settlement, which, of course, are overcrowded and do not yield the possibility of gaining a livelihood. Nothing remains to the Jews, therefore, but emigration, but that is a costly thing in Russia, where no one is permitted to cross the frontier without special permission. So they are obliged first to pay heavily for the necessary passport and then to bribe the frontier officials to let them go. The well-to-do thus pave their way to other countries, realizing their property at a heavy discount, and go to America or to England, flooding London and New York with unskilled labor and poverty, which reduce the rate of wages and the misery of the native lower classes. very poor and helpless Jews are compelled to stay in Russia, and are herded together forcibly in such numbers that they prevent each other from earning what they did before.

This is the policy which has provoked an indignant protest

in all countries (except perhaps in France, where public opinion is blind to every Russian sin for the sake of an alliance which will never be realized); for those countries are placed in the alternative either of refusing hospitality to the unfortunate immigrants or of increasing vastly the ranks of their own penniless laborers. But this policy has had its reaction on Russia herself, for however autocratically governed and self-isolated from Europe, she is dependent for her credit on the European exchanges. In order to make her more independent Mr. Vishnegradski has contrived to amass large metallic reserves in foreign banks, drawing gold from every part of the world. These sums were destined to keep up the rate of exchange, but at the same time to be a war fund in case of foreign complications, and are stated to amount to at least 700,000,000 francs. These reserves may be withdrawn at any moment, and thus would seriously embarrass those banks. The recent loan was meant to increase this fund, but with its failure things will assume a different shape. Russia must pay her foreign creditors from the fund, which, consequently, will go on lessening. The "Novoe Vremya," a Panslavist paper, tries to console itself by the argument that Russia may convert her internal loans, but this is a fallacy, for the reaction of the European failure will not only be a fall of the rate of exchange of the rouble, but a rise of interest in Russia herself, so that the conversion will become impossible.

In short, I think the financial condition of Russia to be a most precarious one. Undoubtedly she has great resources; so has Turkey, but natural treasures are of no avail without the human hand to turn them to the benefit of the nation. As the French finance minister, Baron Louis, said to his colleagues, "Give me a good policy and I will give you good finances." Russia must reform her corrupt administration and her preposterous fiscal policy, she must abandon her aggressive external policy which constantly threatens peace, if she wants to inspire confidence in European creditors. Until she does so, I would warn every capitalist against investing his money in loans which offer no real and lasting security and are mainly calculated to form a fund against the interests of peace and civilization.

F HEINRICH GEFFCKEN.

## THE PERSECUTION OF THE JEWS.

The characteristic feature of the historical epoch in which we are living is an intimate connection between all the nations of the world. It is not mere humanitarianism or philanthropy that directs the attention of the whole world to the so-called "interior affairs" of each nation. In the seventeenth century the Cossacks could massacre 900,000 Jews in Little Russia without being disturbed in this pastime by the intervention of the neighboring nations; nowadays, when there are railroads and steamers to remove hundreds of thousands of wretched beings from the scene of their persecution, it becomes of deep vital interest for all countries, and especially for England and the United States, to consider the anti-Semitic crusade in Russia.

The Jews in Russia are often spoken of as foreigners and new-comers. In truth, very far from being new-comers, the Jews had settled in the places of their present residence some seven centuries before those places were conquered by Russia. In the Muscovite state the Jews were never allowed to settle permanently, and later on the St. Petersburg emperors pursued the same course. But with the acquisition of Poland and Lithuania, Russia received a heritage of about a million Jewish subjects who had been living there from time immemorial. policy adopted toward the Jews was very simple: all the restrictive statutes excluding Jews from residence in Russia proper remained in full force, and in the provinces of the former Polish crown the Jews were left under the old Polish laws. These laws, which date from the seventeenth century and even further back, are still, with some exceptions, the foundation of the present legislation concerning Jews in Russia.

It would be idle to inquire into the justice or injustice of the legal discrimination practised against the Jews in old Poland, in the days when the bonfires of the Inquisition blazed throughout Europe and when Huguenots were driven from France by armed

force. As a matter of fact the Jews had nothing left to them except commerce. In a feudal state land could be owned only by the noble, or held by the bond slave. In the towns, again, the guild organization of handicrafts virtually debarred the Jew from trade, as the Jew was not allowed to join the guild. It is superflueus to add that, not belonging to the Polish nobility, a Jew could not be appointed to any public office. Poor, ignorant, fanatical, the Jews formed a lower class in the nation, despised and maltreated by all the rest of the people.

Such was the condition in which the Jews entered under the protection of the government of the Czars. The Russian law is altogether different from the law of any contemporary civilized country. The fundamental principle of constitutional law declares the state to exist for the purposes of the individual; in Russia, on the contrary, the individual is considered to exist for the purposes of the state. No exception, of course, was made for the Jews, who became objects of incessant experimentation in corpore vili. Now they were induced to join the Greek Church, in order to assimilate with the Russian people; now they were encouraged to purchase land and to practise agriculture; now they were expelled from the villages, in order to prevent them from selling intoxicants.

Prevailing among the Jews there is an impression that the advent of the Czar Alexander II. was attended by a revolution in the underlying principles governing legislation for Jews. But this was far from being the case; the Jews remained the objects of exceptional legislation as before. Political and economical conditions, however, caused Alexander II. to grant the Jews some additional immunities, some new privileges for certain classes of Jews, but no universal rights. In reply to a question about the condition of the Jews, the governors-general and governors of the provinces inhabited by Jews reported that there were many skilful artisans among them who still were living in abject poverty because of extreme competition. Prince Vasilchikov, governor-general of Kiev, stated his convictions as follows:

<sup>&</sup>quot;Were Jewish artisans allowed to work at their trades in the interior provinces of Russia, it would deliver the Jewish communities from an

onerous burden in the paying of taxes, while on the other hand, it would supply mechanics to districts which are in need of them; besides—and this is of still greater importance—the baneful influence exerted at present by the revolutionary agitation of Poles upon an idle crowd, would be prevented by that measure." \*

Thus, originating in financial and political considerations rather than in any solicitude for the interests of the Jews, the new legal measures fully answered the intended purpose. Skilled Jewish artisans belonging to guilds, and certain classes of merchants with their clerks, were allowed to stay permanently or temporarily without the boundaries of the so-called "pale of settlement" embracing the provinces which formerly belonged to the Polish crown, and New Russia. Thus it was that a Jewish population, some hundreds of thousands strong, was spread outside the established "pale." On the other hand, the government deemed it necessary to create in the western provinces a strong local element brought up in Russian civilization, as a counterweight to the Polish nationalistic aristocracy. The bulk of the Jewish population presented at that time, with some exceptions, quite a tabula rasa for any civilizing influence. The government opened to them the doors of almost all public educational institutions, and encouraged Jewish pupils by means of free tuition and fellowships, and by making accessible to Jews, in a measure, the public offices. The metamorphosis effected by this policy during the life of a single generation was indeed astounding. In large cities inhabited by Jews, where a quarter of a century ago scarcely a hundred people could be found who understood Russian, Russian has now become the mother tongue of a considerable portion of the Jewish population. One or two pupils of the Jewish race in a class of forty to fifty boys was the usual proportion as late as twenty years ago; in 1887 the number of Jews in the high schools or gymnasia attained in some places 80 per cent. and even more. A Jew with a high-school or university education is no longer a Jew, as a matter of nationality, but as good a Russian as any of his fellow citizens. Apart from the fact that in so short a

<sup>\* &</sup>quot;Principles of Russian Public Law," by A. Gradovsky, Professor at the Imperial University of St. Petersburg. Vol. i. (1875), pp. 423–424.

time the Jews have achieved prominence in every department of social life—commerce, law, medicine, science, literature, art, etc.—the participation of the Jewish youth of both sexes in the revolutionary struggle against autocracy is a most striking proof of the effected assimilation. The Poles, living side by side with the Jews, have appreciated better than some Russians do now the true extent to which the Jew has become Russian; hence a strong anti-Semitic feeling among the Poles.

The beginning of the present reign and the breaking out of the anti-Jewish riots in 1881, opened a new era in the history of the Russian Jews. The period of the so-called "national policy" of Count Ignatiev was inaugurated by the famous "Provisional Regulations for Jews" of May 3, 1882, bearing the signature of the Czar. In virtue of these regulations, new settlement outside the towns and boroughs was prohibited to Jews, and the acquisition of titles to real estate, either as property or by mortgage or lease, was forbidden to Jews without the precincts of towns and boroughs. This "temporary" law became a source of innumerable "temporary" sufferings.

What is the meaning of "new settlements?" That head-breaking question was a great vexation to the local authorities. Now a family who had left home for a short time on account of business, or to take part in some religious service, were considered as "new settlers" on their return to the village where they had been living for scores of years.\* Now a Jewish soldier who had served in His Majesty's army was not allowed to remain at home with his family, being a "new settler" in the opinion of the authorities.† Then the governor-general of the south-western provinces discovered that the Jews were not allowed to remove from one house to another within the precincts of the same village, as that would constitute a "new settlement," and as, besides, Jews are not allowed to lease houses in villages. Some of those cases were brought before the Senate who, to do

\*See the ukase issued by the Senate to the Provincial Council of Chernigov, November 2, 1884, in the matter of Khututzky and others.

<sup>†</sup> Ukases of May 23, 1884, and January 30, 1885, in the matter of Rieznikov. Also "Niedielnaya Chronika Voskhoda" (a weekly paper), No. 45, 1890, letter from Brest-Litovsk; No. 20, 1889, letter from Liebiech.

them justice, sometimes settled the matter in favor of the appellants—unfortunately, however, always two or three years after the right parties had been evicted by the police and, consequently, entirely ruined. And in such cases there is no action for damages against officials. Moreover, the decisions of the highest court of the empire do not even serve as precedents to the local authorities, who continue to pursue practices decided to be unlawful. Jews being forbidden to conclude contracts on landed property, the police did not allow them to cut timber in the forests. This restriction was decided to be unlawful by the Senate, inasmuch as wood removed from the soil is a chattel, which Jews are not forbidden to acquire.\* Nevertheless two Jewish clerks, named Jacob Zermann and Schlnessmann respectively, were expelled by the police from a forest in the district of Novaya Oushitza, and when they returned again they were tried by the special session of justices of the peace. Strange to say, one of them was released, Justice Hamburtzev being in the chair, while the other was sentenced to three months' imprisonment, the presiding officer being Justice Smaragdov.+

In a word, life in villages has been made unbearable to Jews. A Jew is not allowed to shelter under his roof his aged parents unless they lived in the same village before 1882; he cannot take care of his relatives living in the neighboring hamlet, as he is not allowed to stay there with them and as they are not permitted to dwell in his house. He cannot oversee his property situated in another village. He is not permitted to restore his house after it has been destroyed by fire, or to renew a contract on a mill or on a farm that has for years been rented by his father and grandfather.

Yet there was always one law for non-Jews and another for Jews; according to the general rule everything not prohibited is allowed, but in regard to Jews everything not allowed is prohibited. In 1877, still the "golden age" of the Russian Hebrews, a Jewish butcher living outside the "pale" was condemned for

<sup>\*</sup>Decision of the General Assembly of the I. and Cassation Departments, April 4, 1888; Ukase issued by I. Department to the Podolsk Provincial Council, January 29, 1890.

<sup>†&</sup>quot;Sudebnaya Gazeta" (Court Gazette), No. 13, 1891.

having sold meat to Christian customers, and not to his co-religionists only, as in accordance with the opinion of the court he should have done, there being in the law no special provision which would allow Jewish butchers to sell meat to Christians outside the "pale of settlement." This sentence was affirmed by the Court of Appeals and the Supreme Court of the empire.\* Since the beginning of the present reign such chicanery has become epidemic. Now a watchmaker is found guilty of selling watches, while according to the talmudists of the court he could only repair them.† Then it was discovered by the minister of finance that Jewish handicraftsmen living beyond the pale of settlement are not allowed to use machinery in their work, the word "handicraft" (remeslò) signifying only "handiwork," i.e., work without any automatic implements.‡ These cases are repeated ad infinitum.

In the course of the last two years tens of thousands § of Jews were expelled, according to newspaper reports, from various cities of Russia, not to speak of the previous expulsions during the former eight years. No exception is made for sex or age; in February, 1889, a man 105 years old, Meyer Dimentstein by name, was arrested and expelled from Kiev for having resided there without a legal right to do so. 

The desperate condition into which the Jews are sometimes driven, in trying to avoid expulsion, is best illustrated by the following incident which took place at Moscow a few years ago. A Jewish girl, who had come to the capital to study short-hand, was about to be expelled; she then registered as a prostitute, though remaining innocent, and this registration, according to a special rule, gave her the right to reside in Moscow and practise any profession she liked. Is it not

<sup>\*</sup>Decision of the Criminal Department of the Senate of 1877, in the matter of Krupkin.

<sup>†</sup> M. J. Mysh, "Manual of Russian Legislation about the Jews" (published by the monthly "Voskhod"), p. 190.

<sup>‡</sup> Ib., Order issued to the Revenue Office of Moscow, January 30, 1882. § Ib., p. 121. The number of those only who were expelled or are about

to be expelled from within 50 versts from the frontier, according to a new "interpretation" of the law, is estimated to be at least 80,000.

<sup>&</sup>quot;" Niedielnaya Chronika Voskhoda," 8, 1889. The news was copied by all the Russian papers.

characteristic of the anti-Semitic policy in Russia that educated Jewish women, graduates of colleges, are expelled from Moscow, while Jewish prostitutes are granted permission to reside there?

Restricted in all their natural rights, oppressed and pursued by the law and in spite of the law, the Jews are nevertheless forced to shed their blood for a country where they are considered as foreigners and treated far worse than foreigners. It is only too natural that Jews are not willing to serve in the army; why should they? The anomaly of such a condition seems to have formerly been understood by the government, and accordingly discharged soldiers of the Jewish faith were in 1865 granted the right of residence throughout the empire. But then came the "democratic" reform of military service of 1874, which was followed by this interpretation of the law:

"Whereas there is no more a special class of soldiers, all the classes of society being equally bound to defend their fatherland, therefore all previous privileges (sic) granted to Jewish soldiers may refer only to those who had served their terms under the old statute of recruits, not under the new law of universal military service."\*

In other words, Jewish soldiers who are bound to defend their "fatherland" like all the others, shall not be henceforth allowed to reside in the fatherland aforesaid.

This interpretation gave rise to a new practice, curtailing the civil rights of Jewish soldiers and their families,† and reviving, in application to Jews, the leading principle of Russian law of the seventeenth century, whereby a crime committed by an individual entailed the responsibility upon the whole community of which he was a member. An ordinance issued recently by the governor-general of Warsaw reads as follows:

"It often happens that the enrolling of Jews in the army is delayed because of their deficient bodily development. Recruiting boards have the

\*Circular of the Minister of the Interior, November 11, 1885; Decision of the Criminal Department of the Senate (1887), in the matter of Zhivotingsky.

† Ukases of the I. Department of the Senate: November 11, 1886, in the matter of Kamensky; March 31, 1887, in the matter of Neufeld; May 4, 1887, in the matter of Canfor; November 18, 1887, in the matter of Bach; December 16, 1887, in the matter of Levin; October 11, 1886, in the matter of Mirkis. Decision of the Civil Department, No. 39, 1888.

power, however, to subject such recruits to sudden examinations, regardless of delay. Since the places to which they are called for examination are, in the majority of cases, at considerable distances from the homes of the recruits, the latter, remaining free from surveillance, may either manage to main their bodies before reaching their destination, or to substitute other persons for themselves, in order to avoid military service. To prevent such cases it has been found necessary that Jewish recruits should be forwarded from their homes to the boards in no other way than by étape [that is, with gangs of prisoners]. The Department of the Interior, as well as the Department of War, sees no reason why Jews whose service in the army is delayed by physical backwardness, should not be brought by the police before the boards for medical examination, in cases where such a course becomes necessary."\*

Thus all young Jews who comply with the law and duly report for military duty are invariably imprisoned with criminals and handcuffed to burglars and incendiaries, stopping every now and then in the jails on their route, lest some of them might maim themselves! There is a law that "no one shall be punished except for a crime and by sentence of a court; "+ yet this law is not enforced by ministers and governors-general. On the contrary, there is to-day a bitter rivalry among the officials to outdo each other in "anticipation of the views of their superiors," that is, in inventing some new oppressive measure against the Jews. This peculiar sport is moderated only by the general corruption of the police, which makes it at times possible for the Jews to obtain relief from the endless series of prohibitions standing in their way. Hence the new charge against the Jews of "eluding the law." It must be borne in mind that Russian legislation about the Jews is made up of statutes belonging to quite a different historical epoch from ours. A trip from Warsaw to Siberia takes nowadays no longer than a journey to St. Petersburg fifty years ago. The development of trade and commerce has made it impossible for millions of people to be confined within the bounds prescribed to them in the seventeenth century. To insist on the enforcement of laws that have become obsolete is surely equivalent to the enactment of new oppressive measures. It is a universally accepted rule of jurisprudence that a law may be repealed by coming into disuse. There seems to have been a time when

<sup>\*&</sup>quot; Sudebnaya Gazeta," No. 3, 1891.

<sup>†</sup>Code of Criminal Procedure of the Emperor Alexander II., §§ 1 and 14.

this was recognized by the Russian rulers. In 1880, during the dictatorship of the liberal Loris-Melicov, it was ordered by the minister of the interior that those Jews who were residing outside the pale of settlement before the promulgation of the ordinance already mentioned should not be expelled, even if they had lived there unlawfully. The principle stated herein, however, was very soon forgotten; and owing to the anti-Semitic rage the policy of the government is now taking quite an opposite direction, as is shown by the recent banishment of at least 30,000 Jewish "mechanics, distillers, brewers, and artisans" from the city and province of Moscow, in conformity with the ukase of the Czar of March 28, 1891. Who is next? that is the question every Jew is asking himself at present. Who can foretell what is going to happen to-morrow?

The whole number of those who are expelled or are to be expelled, according to the new regulations, has been estimated by the London Russo-Jewish Committee at more than one million. This number hardly seems to be exaggerated; there are no statistics in Russia to show in figures the intensity of the persecutions, but we may draw some conclusions from the fact that more than 200,000 Russian Jews have emigrated to the United States and more than 50,000 to England, since the riots of 1881, at the beginning of the present anti-Semitic policy. Many more have overcrowded the towns of south-western Russia for want of means for emigration. Besides, all the restrictions concerning trade, commerce, liberal professions, education, etc., are weighing upon all Russian Jews without exception. It may therefore be said that the number of those crushed down by Russian despotism exceeds by far that of the Bulgarian sufferers who excited public sympathy in 1876-77.

All classes of English society have united in a strong protest against the barbarous treatment of millions of innocent children, women, and old men of the Jewish race. A large meeting of London workingmen expressed their sympathy with the victims of the persecutions. Another meeting, presided over by the Lord Mayor of London, was called by the most prominent representatives of the English aristocracy, with the intention of reaching some practical results. By its refusal to accept the memorial

offered by this Guildhall meeting, the Russian government has thrown down the gauntlet to the English nation and to the whole civilized world. The anti-Semitic press in Russia and the well-known advocate of Russian autocraey, Madame Novikov, in the London papers, were unanimous in ridiculing this manifestation of public opinion; a great military power, they say, having 2,000,000 soldiers, will not listen to arguments from public meetings in foreign countries. Nevertheless, the Guildhall memorial has produced a permanent effect, which seems to me to be of the greatest importance; it has unquestionably settled that the Russian autocraey is deaf to any arguments of public opinion, however moderate and respectful, and that it recognizes no other law than that of brute force.

Nothing seems so disgusting as the question, much discussed now in the press, whether the Czar himself favors or hates the Jews, whether he knows or ignores the real condition of affairs in Russia, whether he is a gloomy despot or a tender-hearted father and patriarch. Although no one, not even a newspaper correspondent, is able to read the heart of the Russian Son of Heaven, I would fain take for granted his domestic virtues as well as his ignorance; yet of what consequence is it in connection with the question? Granted that an autocrat may be powerless to the extent of being unable to obtain the Russian newspapers, where the meanest of his subjects may learn day by day examples of cruel oppression and misuse, reported as a matter of fact, in a very business-like manner; is it not distressing that the destinies of millions should depend upon the good will of a single pious man who, "knoweth not what he doeth?"

Yet even in an autocratic monarchy there are some other agencies besides the Czar to determine public policy. There can be no doubt that the anti-Semitic views of the government are shared by a considerable portion of the people. What are the reasons of this general anti-Jewish feeling? Is it a matter of bigotry or of race prejudice? Both of these elements, unquestionably, play their parts in producing the present persecutions. Although the educated Russians are not, as a rule, religiously inclined, yet the lower classes, including the merchants,

are very religious, and the government in its turn maintains by all the means in its power the predominance of the Greek-Catholic Church. Jews are despised as "miscreants" by the masses, while as dissenters they are oppressed by the state. There are regulations limiting the freedom of Jewish religious service, but on the other hand a Jew may get rid of all restrictions by becoming a Christian. Of still greater moment is the innate racial aversion to Jews which is universal among the educated and atheists, as well as among the ignorant and orthodox. However, these factors are only derivative phenomena having their roots in the economical and political condition of Russia. The main question to be considered is: Who is benefited by the persecution of the Jews?

The general outcry is now against "Jewish exploitation." Habent sua fata libella, and words have their fates too. It is rather peculiar to hear a governor-general talk of "exploitation," which some fifteen years ago was synonymous with socialistic propaganda punished by exile to Siberia. In the language of socialism, whence the word came into the Russian press, "exploitation" means any industrial gain except by labor. Now, is there really some specifically "Jewish exploitation?" Is it true that the Jews are parasites, avoiding productive labor? Go to any of the cities within the celebrated "pale"; you will be convinced of the absurdity of such an assertion. The majority of the inhabitants of towns and boroughs, amounting sometimes to 90 per cent. of the whole, are Jews. Is it possible that all those people should be supported by the rest? As a matter of fact, every kind of productive work is, in the cities of their residence, confined to the Jews; there are very few Christian laborers there even for the hardest work of blacksmiths, carpenters, diggers, carriers, etc.; the overwhelming majority are Jews. Of course, a considerable part of the Jews are middlemen, or, to use the word in vogue, are engaged in "exploitation." Suppose, for argument's sake, that persecution of business people is the wisest policy for the welfare of the working classes, what is the

<sup>\*</sup>Code of Laws of the Russian Empire, Vol. XI., Part I., Law on the Religious Affairs of Foreign Denominations, §§ 1060–1862; Vol. XIV., Law on Prevention of Crimes, § 98.

use of persecuting one class of "exploiters" while others are given full play? The answer of political economy would be that by so suppressing competition nothing but a monopoly for the Christian business men will be created, which will accrue to anything but the benefit of the working-classes. Some facts taken from the life within and without the pale of Jewish settlement will make the matter plain.

We read in a letter from Orgeyev, a town within the pale, that on account of a claim of a village usurer against several peasants, their estates were sold by auction. The houses were estimated first at 100 and 150 roubles each, but there having been no buyers, the sale began the second time below the estimate. The Jews who were present could not take part in the sale, being barred from the acquisition of real estate in villages. Thus the creditor, who was the only bidder, took all the houses at from six to nine roubles each, and the peasants, after having lost their property, remained still insolvent debtors of the Russian orthodox usurer (kulak).\*\*

Another characteristic fact was reported from the district of Pavlovo, Province of Nizhni-Novgorod, one of the principal centres of petty industry, which is of great importance in Russia:

"After the Jews were expelled from the market by order of the governor, the general condition of the artisans became worse than ever. The Jews bought every week wares for many thousands in cash. . . . Now the artisan can never get a fair price. Still, even when selling at half price, he is not paid in cash, but is compelled to receive payment in truck. . . Thus he cannot help carrying his products to the usurer and paying the latter two per cent. a week. In this way the artisan is placed at the mercy of the usurer." †

As it was stated afterward by V. G. Korolenko, the prominent Russian novelist, who inquired into the matter on the spot, the expulsion of the Jews was a result of intrigues of the *kulaks*, whose receipts were lessened by Jewish competition and who requested the authorities that the Jews should be expelled from the market. Similar petitions were offered also by the stall-keepers at the market of the city of Kiev, by the fishmongers of

<sup>\* &</sup>quot;Niedielnaya Chronika Voskhoda," No. 2, 1891.

<sup>† &</sup>quot;Russkiya Viedomosti," No. 60, 1890, and also "Petersburgskiya Viedomosti" (a conservative and somewhat anti-Semitic paper), January, 1890.

Tzaritzyn, and so on, as usual under the pretext of protecting the "genuine" population against "Jewish exploitation."

These facts sufficiently show who gain by the anti-Semitic policy. By oppressing Jewish merchants, lawyers, physicians, civil engineers, guild artisans, clerks, and the like, more freedom is given to their Christian competitors. Thus, material benefit, that prime motive, is held out to the orthodox Russian middle class as a bait for their support to the government, by identifying material interest with the safety of the present political system. On the other hand, the "national" campaign against "Jewish exploitation" plays in Russia the same part as was played in Germany by the so-called "Christian socialism" of Pastor Stoecker, unfortunately far more successfully than in Germany.

A leading anti-Semitic paper, published at St. Petersburg, frankly declares:

"No Russian can take the part of the Jews unless he is an enemy of the autocratic Russian throne. None but the blind can doubt that this vital question confronts Russia to-day. Indeed, all the liberals of our educated classes, in all circles, from the liberal officials up to the press, are plainly and decidedly on the side of the Jews, that is, all those Russians are on their side who strive for the abolishment of the power of the Orthodox Church and autocracy."\*

To bring confusion into the ranks of the adversaries of autocracy, to deceive a portion of them by representing that autocracy advocates the interests of the Russian "people" against "Jewish capital," to demoralize the others by exciting the instincts of selfishness of a "predominant nation," and consequently to break up the spirit of liberal and radical opposition by creating a strong "national" party among the educated classes, in sympathy with the government—such is the other object of the present "national" policy of the autocracy. This is clear in the case of the decree of 1887 practically keeping Jews out of the public schools and universities. The latter were always the hot bed of opposition in Russia. Now, by denying Jewish students the right to fellowships, better conditions are created for their Russian colleagues. Thus the material interests of the Russian students have been connected with the existing political system, and to some extent a "national" feeling has been aroused even among

<sup>\* &</sup>quot;Grazhdanin," June, 1889.

the students, in opposition to the radical aspirations formerly universal among them. The government always feared the growth of education among the lower classes, as was openly confessed by the circular for 1887 of the minister of education, who pointed out that "children of drivers, waiters, and washerwomen" should not be admitted to higher studies. The number of high schools was always restricted and half of the candidates were always refused for "want of space," or for failure to pass examination. Of course, the parents of these unlucky boys were in strong opposition to the policy of restricting the right to public education. Now there is within the pale of Jewish settement no longer a "want of space," since the Jewish scholars, who used to form the majority, are not admitted at all; consequently there is no reason for discontent on the part of Christian parents who feel themselves protected by the Christian government of the Czar against "Jewish exploitation."

Of course, this "national" policy has no bearing upon the interests of the masses of the people. But in an autocratic monarchy, where the nobility and the middle class are the sole representatives of the so-called public opinion of the nation, this is of little consequence. As to the peasantry and the working class, who are kept in ignorance, the Jews are pointed out to them as the only cause of all evil in Russia, and the current of discontent among the impoverished and toiling masses is turned against the "sheeny" (zhid). While almost all the liberal papers and magazines have one by one been suppressed since 1889, the anti-Semitic press, forming now the prevailing part of current literature, and the official papers of the government,\* have made it their special purpose to excite the feelings of race-hatred and intolerance, which would have seemed some fifteen years ago buried in the darkness of the times of Torquemada.†

The standard of the anti-Semitic press is such that even in the famous case of a Jewish child who was maimed by an anti-Semite, it was not ashamed to take the part of the latter. I

<sup>\*&</sup>quot; Warszawsky Dnievnik" (Warsaw Daily); "Wilensky Viestnik" (Wilno Messenger), etc.

<sup>†&</sup>quot; Nabludatel" (monthly), May, 1891; "Moskovskiy Listok" (daily), No. 127, 1891.

wish to recall this case to my readers. A small Jewish boy named Rutenberg was caught picking up strawberries in a garden in Bialystok, by the owner of the garden, Dr. Granowsky. The physician first locked up the boy in a closet, then he imprinted on the lad's forehead the word "thief," in Russian, German, and Jewish, burning the characters into the skin by means of caustic. As the news spread through the city, a dense throng of Jews, indignant at the barbarous treatment of a child, assembled before the doctor's house, but was dispersed by the police. In the mean time false rumors were spread by the doctor that his little daughter had been murdered by the Jews, and steps were taken by him to excite the railroad workingmen to an anti-Jewish riot, fortunately without effect. The attitude taken in the case by the government was of great significance. Was the doctor tried and condemned according to the law? Quite the reverse. But Rabbi Marcus and Dr. Chasanovitch, the representatives of the Jewish community who made an attempt to prosecute the physician, were exiled from the city by order of the governor-general of Wilno, for exciting disorder and disturbing the peace.\* The same governor-general, in an address to the aldermen of Wilno, threatened the Jews with "severe punishment without trial," and the same threat has been repeatedly expressed in recent decrees of the chief of police of Odessa and of the governor of Mohiley, charging the Jews in vague, yet sharp terms, with general depravity and corruption. The wickedness of the Jews is manifested, in the opinion of the above-named dignitaries of the state, by disturbing order, by crowding the streets and sidewalks, as well as by disrespect toward superiors, which means failure to remove their hats on meeting officials. The end aimed at by these declarations is openly to put the Jews in the position of a lower, despised caste, that can be insulted with impunity by any one belonging to the "predominant nation." The brazenfacedness of the persecutors culminates in a kind of voluptuousness of cruelty when we find a district attorney declaring to a Jewish delegation: "We shall flay you in the market without any more ado!" or a marshal of nobility as-

<sup>\* &</sup>quot;Sudebnaya Gazeta," No. 5, 1891.

serting that for such purpose, "the most honorable members of the Jewish community will be chosen to set an example." \*

A press despatch of June 29th, to the effect that "serious anti-Semitic riots have occurred near Kherson," came as if on purpose to show the influence produced by similar official utterances upon the minds of the ignorant masses. The bulk of the "genuine Russian people" are brought up in the spirit of "knownothingism" hostile to every stranger. The same "national" policy as applied to Jews, although without the spirit of cruelty manifested toward the Jews, is pursued against the Baltic Germans, against Poland, and recently against Finland.

Thus it appears clear that the persecution of the Jews is a constitutent part of a calculated and well-planned scheme on the side of the government. By instigating the Ests and Lettonians against the Baltic Germans, the latter and the Poles against the Jews, and the orthodox Russian "nation" against all, the government intends to put one half of the population of the empire—the orthodox Russians—in the position of a "predominating nation" prevailing over all the rest through their all-powerful national autocratic government. "Divide et impera!"

## ISAAC A. HOURWITCH.

<sup>\*</sup>These declarations were made by Prince Meshchersky, marshal of nobility, and Mr. Sushkov, district attorney of Mstislavl, province of Mohilev. ("Niedielnaya Chronika Voskhoda," No. 27, 1890.)

## REFUGE FOR RUSSIAN JEWS.

I SHOULD gladly grant the request of the editor of the FORUM to write at length my views on the present situation and the probable future of those Jews who live under political disabilities in European states, if I did not fear that through activity as a publicist I might be taken from my chief occupation of philanthropy, and that if I should devote myself to the former occupation, it would be at the expense and to the detriment of the latter.

Besides, to take up the subject thoroughly one would have to write an historical study of the settlement and spread of the Jews in the several European states, and to collect statistical data of their numbers, for which tasks my occupation allows me no time, and it would be to no purpose, since all such information is accessible in statistical works. I refer, besides, to the two articles that M. Leroy-Beaulieu has recently published in the "Revue des Deux Mondes."

But I took occasion lately to express my views with regard to this question in the following statement, published through Reuter's agency, which explains in particular my plans with regard to the sad condition of the Russian Jews:

"The measures now being enforced against the Jews, which are equivalent to the wholesale expulsion of the race, do not appear to me to be altogether misfortune for the Russian Jews. I think that the worst thing that could happen to these unfortunate people would be to continue, for an indefinite period, the wretched existence which they have led up to the present time, crowded together in narrow streets, merely vegetating without hope and without a future, reduced to a condition incompatible with the dignity of human beings. The only means to raise their condition is to remove them from the soil to which they are rooted and to transport them to other countries, where they will enjoy the same rights as the people among whom they live, and where they will cease to be pariahs, and become citizens. What is going on in Russia to-day may be the prelude to this beneficent transformation, and this is why, while I am filled with horror at the atrocities that are being committed, I hope to find a possi-

binty of deriving from them some advantage for the unfortunate victims of oppression, and of facilitating their expatriation, which is their only means of salvation. It is true that the Jews have lived and labored for ages under the Russian empire, and that they have consequently acquired an incontestable right to the soil on which they live. But all this is a matter of pure theory which avails nothing against fact or against the indomitable will of a government like that of Russia, which is persuaded that Jews ought not to be tolerated within the limits of the empire, and that their presence is literally a desecration of the country. There exists among Russian statesmen a rooted conviction to that effect, not merely arising from antipathies due to race, but based, at the same time, on religious belief. A proof that such is the case is furnished by the fact that dissenters from the Orthodox faith are liable to measures which, if less violent than those applied to the Jews, are analogous to them in form.

"In the presence of this principle of exclusiveness transformed into a dogma I am of the opinion that all endeavors to moderate the resolutions of the government must inevitably fail, and, I repeat, I consider the necessity in which the Jews in Russia are placed, of leaving a country where they are subject to such treatment, as not an unmixed misfortune. But the treatment to which the Jews are now being subjected is such as to excite the indignant reprobation of the entire civilized world. The facts that have been recorded by the most trustworthy witnesses recall to mind the most terrible episodes in history, and should be branded as an outrage upon all feelings of humanity. People against whom there was not the shadow of reproach, who went about their business quietly, have been aroused from their beds at night, driven with whips from their dwellings, loaded with chains, and plunged into the deepest misery. Women, young girls, and children have been subjected to outrages such as I should have refused to believe possible, were they not attested by absolutely trustworthy witnesses, whose statements I do not even venture to reproduce. Hundreds of families, expelled from their homes and deprived of any kind of shelter, have been compelled to wander for days and nights in cemeteries, suffering from hunger, and exposed to all the inclemency of the climate. Women have brought forth children in the open fields, and have died from exposure. These barbarous doings may more fitly be called a terrible misfortune for the Jews than the principle of expulsion which the Russian government has decided to enforce against them. Their expulsion is unjust; still, I accept it as an accomplished fact; but the needlessly cruel manner in which it has been carried out is a dishonor to the age in which we live.

"But admitting that the principle of expulsion is irrevocable, I perceive a means—indeed, two ways—of alleviating the miserable lot of the Russian Jews. The first is to make the Czar acquainted with the truth respecting the cruelties that are perpetrated in his country and in his name. I am convinced that it would not be in vain to appeal to the sentiments of justice, humanity, and mercy of the sovereign who occupies the throne of Russia, and who is assuredly unaware of the acts of persecution committed under

the shield of his authority upon a section of his subjects. If His Majesty could be made fully aware of what is going on, I am certain he would not hesitate to put a stop to such barbarity, and that, while maintaining the principle that inspires the policy of his government in regard to the Jews, he would give the necessary orders for the application of this policy in a humane, gradual, and moderate manner.

"This brings me to the second means—the establishment of a certain degree of order and method in the expatriation of Jews from Russia. government of the Czar means to get rid of five millions of Jews who inhabit Russian territory. Let it allow the many who, like myself, are interested in the fate of these victims of persecution, and who will certainly be prepared to make the greatest sacrifices on their behalf, to save them. Without such help it would be impossible for the government to get rid of five millions of Jews except by slaughtering them in a mass. The Jewish nation has often been compelled to emigrate; let those of the Children of Israel who dwell in Russia bow to the same destiny, but let us be allowed time to look about to seek new homes for them in other regions. Perhaps the Czar, who combines with his religious zeal a sincere spirit of integrity and justice, will himself take the initiative in granting the Jews the time they require to leave Russia by degrees, quietly, and in good order. Let a period of twenty years, let us say, be fixed; let it be agreed that every year a certain number of Jews will leave the country; but let them be left in peace until the hour of their departure arrives. If the Czar will order a measure of this character to be adopted, those who are interested in the fate of the Russian Jews will do what is necessary to provide funds for conveying to their new country the number of emigrants ordered to leave yearly. By this means it will be possible to carry out, without any great hardship and with a minimum of suffering for those concerned, the principle of expulsion decided upon by the Russian government.

"I am under no delusion. I have no hope that the expression of my ideas will reach the eye of the Czar. But possibly these explanations may find favor with the supreme Russian authorities, and they may take upon themselves to submit to their sovereign the necessary measures for carrying them into effect. The entire civilized world, and above all the poor persecuted beings in whose behalf I speak, will render homage to the generosity of the Czar, if he will, by the exercise of his imperial will, put a stop to the acts of the lower officials who abuse the powers placed in their hands for the purpose of misinterpreting his intentions, and if he will enact that the edict of exile against several millions of his subjects shall cease to be, practically, the condemnation of an entire nation to pitiless persecution, misery, and death."

"Last year I sent a commission to the Argentine Republic to prosecute an investigation as to the practicability of my scheme. Some members of the commission came back this year to report, and the information they brought me was so far satisfactory that I have sent them out again with instructions to purchase land. This is being done now, but nothing is ready for the reception of emigrants. When the proper time comes, I shall appoint committees at Hamburg and other towns to receive, inquire into, and accept applications from destitute Jews, after which a free passage to their new homes will be provided for the successful applicants. I do not intend to make the mistake of crowding the colonists together at once in one place. I shall divide the land into plots, sections, and villages, and have everything ready for the emigrants before they are sent out. In each village I shall place a number of earlier Jewish colonists, whose prosperity and experience will encourage, aid, and stimulate the new-comers."

I may speak, however, with regard to the question of the present condition of one portion of the European Jews, namely, those who live under special laws, and whose fate, especially since it has taken such a hard line in Russia, excites the pity not only of the co-religionists of these unfortunates, but also of all friends of humanity. To do justice to this subject and to go to the bottom of it, one must strive to avoid the error of putting all classes of the Jewish population into one category, for under such treatment the enormous majority would suffer; namely, the poor.

Let us give these for once the first place, which in real life they never have. These great masses of poor Jews are the eternal prototype of martyrdom, of suffering, of persecution. Without law or protection they have been wandering on their thorny path like Pariahs of human society for centuries, bent under the double weight of their heavy burden and of universal contempt. People cast at them the reproach that they are not productive forces of society, but devote themselves only to trade, which brings quick profits. Granted that it is so; could it be otherwise when they have for centuries been denied every occupation of a good citizen—especially the tilling of the soil; shut out of honorable employment and so forced, if they did not wish to starve, always to seek some way to earn bread for themselves and their families? If in this way this power and this fertility of resource have been evolved in them at the cost of other qualities, I believe that no one has the right to reproach them for it.

It is easy, however, to give a refutation of this charge. Where the Jews are free from these shackling fetters, there their best powers have turned to scientific investigation, to art, and to poetry. The names of Disraeli, Mendelssohn, Halévy, Meyerbeer, Heine, to which can be added a long list of others, suffi-

ciently illustrate this assertion. It is also a universally known and acknowledged fact that the medical profession has received its best recruits from the Jews, and that the most eminent physicians of Europe belong to this race. Where they hold professors' chairs in universities, it is chiefly the abstract branches of knowledge that they impart; and the scientific spirit of research belongs, above all, to them.

Among the great masses who must toil for their daily bread, certainly many have not yet devoted themselves to tilling the soil, and on this account their enemies have devised the charge that Jews are of no use in agriculture, that they are averse to all hard work. Here also experience gives a refutation. In the lands where Jews have been permitted to acquire landed property, where they have found opportunity to devote themselves to agriculture, they have proved themselves excellent farmers.

For example, in Hungary they form a very large part of the tillers of the soil, and this fact is acknowledged to such an extent that the high Catholic clergy in Hungary almost exclusively have Jews as tenants on mortmain properties, and almost all large landholders give preference to the Jews on account of their industry, their rectitude, and their dexterity. These are facts that cannot be hid, and that have force, so that the anti-Semitic movement, which for a long time flourished in Hungary, must expire. It will expire because every one sees that so important a factor in the productive activity of the country—especially in agriculture—cannot be spared. My own personal experience, too, has led me to recognize that the Jews have very good ability in agriculture. I have seen this personally in the Jewish agricultural colonies of Turkey, and the reports from the expedition that I have sent to the Argentine Republic plainly show the same fact.

These convictions led me to my activity to better the unhappy lot of the poor down-trodden Jews, and my efforts shall show that the Jews have not lost the agricultural qualities that their forefathers possessed. I shall try to make for them a new home in different lands, where as free farmers, on their own soil, they can make themselves useful to the country. If this should not come to pass among the present generation, the next will

surely fulfil this expectation. But to return to the point—all the facts cited lead plainly to the conclusion that the Jews possess the necessary qualifications not only for science and art but also for agriculture, and that the charges made against them are

in great part founded on an error.

I do not know how the state of feeling is in this respect among you in America—that is, what the deportment of the wealthy Jewish population is toward the Christians and vice versa; whether there also the Jews who are rising in the world meet with a certain friction and exclusiveness in social intercourse. I know nothing of the situation, yet it seems to me that in free America, where the whole social organization is of recent date, where only modern views can take root, anti-Semitic feeling would be a veritable anachronism.

But the European situation I know from my own observation. Here also, I think, anti-Semitic feeling, directed especially toward the rich, must disappear in some years, and indeed, "faute de combattants," as the French say.

This question is of such great importance that it should not be without interest to go into it more closely, and I must enter a little into detail about it that I may make myself understood. Let us, for this purpose, divide the Jewish people into three groups—the poor, the middle class, and the rich. The poor are usually only mocked at, and can therefore not become objects of envy; the middle classes have not risen so high that they attract the attention of those above them or excite jealousy; the third group, then, alone remains, namely, the rich, who in the last half of this century have amassed not millions, but billions, and have excited special envy because at the same time with their rise in material prosperity others, once the only social leaders of the feudal classes, instead of going forward have gone backward and -without thinking of their own deficiencies-have treated the wealthy Jews as the cause of their fall. Besides, the luxury that comes with wealth, as if of necessity, and the expenditure consequent upon it, excite universal notice and envy. Even the riches of this class are cast in their teeth, without consideration that through their spirit of enterprise, through their admirable knowledge of business, they have enriched the

lands in which they live, and increased the national welfare. It is they who are especially to be thanked for the construction of railways, the setting on foot of great industries and the like, that have aided the states concerned to attain greater prosperity. Wealth has its obligations as well as its privileges. No class has ever been more ready to recognize and discharge those obligations than the Jews, who, in all countries where they have amassed sufficient property to free themselves from absolute want, have been foremost in works of philanthropy, irrespective of creed or race. If that enterprise, energy, and ability, which they possess in a large degree, be a cause of prejudice, then the fault lies at the door of our civilization, rather than at that of the Jewish race. The careful student of our civilization will recognize that the material development which characterizes the nineteenth century has redounded largely to the benefit of the lower classes, and has placed them, in all enlightened countries, in the possession of many comforts of life which in past ages were the monopoly of the favored few.

M. DE HIRSCH.

## IMMIGRATION AND DEGRADATION.

To me, as a student of the American census, the statistics of the foreign elements of our population have had a peculiar interest. To note the first appearance, in the web of our national life, of these many-colored threads; to watch the patterns which they formed as they grew in numbers during the successive stages of our development, was always a fascinating study. But, curious and even instructive as are inquiries into the varying aptitudes, as to residence and occupation, manifested by the several foreign nationalities represented among us, or into their varying liabilities to different forms of disease, of physical infirmity, or of criminal impulse, I shall confine myself in this paper to speaking of the influence exerted by our foreign arrivals upon the native population in the past, and to considerations arising upon the contemplation of the overwhelming immigration of the present time.

False and absurd as are many of the views prevalent in the old world regarding things American, there is no other particular in which European opinion has been so grotesquely in the wrong, as in respect to the indebtedness of the population of the United States to continuous immigration from abroad. Conclusions have been announced and unhesitatingly accepted in Europe, and, indeed, copied and repeated long without contradiction here, which are of the most astonishing character, in the highest degree derogatory to the vitality of our native American stock, and to the sanitary influences of our climate. Thus, Mr. Clibborne, in a paper entitled "The Tendency of the European Races to Become Extinct in the United States," read before the British Association for the Advancement of Science, in 1856, stated the following stupendous result of his investigation:

<sup>&</sup>quot;From the general unfitness of the climate to the European constitution, coupled with occasional pestilential visitations which occur in the healthier localities, on the whole in an average of three or four generations,

extinction of the European races in North America would be almost certain, if the communication with Europe were entirely cut off."

In speaking of entirely cutting off communication with Europe Mr. Clibborne did not, could not, mean such a painful severance of relations as would deny the American people the privilege of studying their own character and manners in the discriminating, dispassionate, yet genial narratives and essays of a Mrs. Trollope or a Lepel Griffin; but only such restriction of intercourse as would put a stop to Europeans coming hither, as seals resort to the Alaskan islands, to deposit their young, the proper fruit of more benignant climes. Were this constantly renewed supply of fresh blood from other lands cut off, Mr. Clibborne declared, the white race on this continent would soon become extinct.

With the readiness so characteristic of Europeans to swallow any opinion or statement of fact regarding Americans, provided only it be sufficiently disparaging, it is not to be wondered at that an Englishman should have been found to announce such a result; and that millions of Englishmen, Frenchmen, and Germans should have been found to believe and to repeat it; but unfortunately similar conclusions were at about the same time promulgated by two persons resident in the United States, assuming the air, at least, of careful sociological investigators. the same year that Mr. Clibborne's paper was read, Mr. Louis Schade, of Washington, put forward some elaborate statistical computations to establish the proposition that the rate of natural increase in the descendants of the original population of the United States, in 1790, had, by that time, been reduced to 1.38 per cent. per annum. Vastly the greater part of the mighty increase which had raised the four millions of 1790 to the twenty-eight millions of 1856, Mr. Schade attributed to the fecundity of the immigrants into the country subsequent to 1790. I trust that it is not below the dignity of this magazine to allow me to say that Mr. Schade's elaborate demonstration of the decay of reproductive vigor among the elder population of the United States was simply bosh. Blunder had been piled upon blunder to reach this Olympian height of absurdity. Yet so lacking was this country in trained statisticians competent to deal with

such a piece of charlatanry, that Mr. Schade's conclusions remained unchallenged at home, and were widely circulated abroad, to the confusion of all good Americans.

In 1870 Mr. Frederic Kapp, a scholar and a man of some pretensions to statesmanship, read a paper before the American Social Science Association, in which he warmly supported Mr. Schade's views, giving that person much credit for his original and penetrating methods of statistical analysis. Original they certainly were. Mr. Kapp proceeded, by methods entitled to equal praise on the same account, to complete the work in this field, reaching the conclusion that, of the population of 1850, but 36 per cent., and of the population of 1860, but 29 per cent. were American, in the sense of being derived from the inhabitants of 1790, all the vast remainder consisting of the survivors or the descendants of immigrants since that date.

By this time it was not so easy or safe an exploit to pluck the feathers of the American eagle. Statistics had begun to be cultivated in a small way here; and Kapp's performance called forth a reply from the late Dr. Edward Jarvis, the first president of the American Statistical Association. Dr. Jarvis's paper will be found in the "Atlantic Monthly" for 1872. In it he completely demolished the flimsy structures which Schade and Kapp had reared. Time will not serve to follow Dr. Jarvis's exposure of the successive statistical blunders which had allowed conclusions so disparaging to the vitality of our people. Two instances will suffice. Mr. Schade had confounded the number of children surviving at the end of a year with the number of children born during the year; the fact being that from 109 to 115 or more children (according to the conditions of infant life prevailing in the community) must be born during a year, in order that 100 shall survive at the end of it. Mr. Kapp, on his part, had to his own satisfaction established a natural increase of the foreigners supposed, in the absence of exact data, to have arrived in the country between 1790 and 1800, which would have required every female among them to bear 18.07 children each year, to satisfy the requirements of the assumption. Dr. Jarvis reached the conclusion that of the population of 1850, more than 80 per cent., and of the population

of 1860, more than 71 per cent., were American in the sense given to that word by Mr. Kapp, instead of only 36 and 29 per cent. respectively, according to the deductions of that writer.

Now, it is to be freely admitted that between 1850 and 1870 the rate of increase in the pre-existing population of this country fell sharply off; and that between 1870 and 1890 that decline has gone on at an accelerated ratio. From the first appearance of foreigners in large numbers in the United States the rate of increase among them has been greater than among those whom they found here; and this disproportion has tended continually, ever since, to increase. But has this result been due to a decline in physical vitality and reproductive vigor in that part of the population which we call, by comparison, American, or has it been due to other causes, perhaps to the appearance of the foreigners themselves? This is a question which requires us to go back to the beginning of the nation. The population of 1790 may be considered to have been, in a high sense, American. It is true that (leaving the Africans out of account) it was all of European stock; but immigration had practically ceased on the outbreak of the Revolution, in 1775, and had not been renewed, to any important extent, at the occurrence of the first census; so that the population of that date was an acclimated, and almost wholly a native population. Now, from 1790 to 1800, the population of the United States increased 35.10 per cent., or at a rate which would have enabled population to be doubled in twenty-three years; a rate transcending that maintained, so far as is known, over any extensive region for any considerable period of human history. And during this time the foreign arrivals were insignificant, being estimated at only 50,000 for the decade. Again, from 1800 to 1810, population increased by 36.38 per cent. Still the foreign arrivals were few, being estimated at only 70,000 for the ten years. Again, between 1810 and 1820 the rate of increase was 33.07 per cent., and still immigration remained at a minimum, the arrivals during the decade being estimated at 114,000. Meanwhile the population had increased from 3,929,214 to 9,633,822.

I have thus far spoken of the foreign arrivals at our ports, as estimated. Beginning with 1820, however, we have custom-

house statistics of the numbers of persons annually landing upon our shores. Some of these, indeed, did not remain here; yet rudely speaking we may call them all immigrants. Between 1820 and 1830, population grew to 12,866,020. The number of foreigners arriving in the ten years was 151,000. Here, then, we have for forty years an increase, substantially all out of the loins of the four millions of our own people living in 1790, amounting to almost nine millions, or 227 per cent. Such a rate of increase was never known before or since, among any

considerable population, over any extensive region.

About this time, however, we reach a turning point in the history of our population. In the decade 1830-40 the number of foreign arrivals greatly increased. Immigration had not, indeed, reached the enormous dimensions of these later days. Yet, during the decade in question, the foreigners coming to the United States were almost exactly fourfold those coming in the decade preceding, or 599,000. The question now of vital importance is this: Was the population of the country correspondingly increased? I answer, No! The population of 1840 was almost exactly what by computation it would have been had no increase in foreign arrivals taken place. Again, between 1840 and 1850, a still further access of foreigners occurred, this time of enormous dimensions, the arrivals of the decade amounting to not less than 1,713,000. Of this gigantic total, 1,048,000 were from the British Isles, the Irish famine of 1846-47 having driven hundreds of thousands of miserable peasants to seek food upon our shores. Again we ask, Did this excess constitute a net gain to the population of the country? Again the answer is, No! Population showed no increase over the proportions established before immigration set in like a flood. In other words, as the foreigners began to come in larger numbers, the native population more and more withheld their own increase.

Now, this correspondence might be accounted for in three different ways: (1) It might be said that it was a mere coincidence, no relation of cause and effect existing between the two phenomena. (2) It might be said that the foreigners came because the native population was relatively declining, that is, failing to keep up its pristine rate of increase. (3) It might be said

that the growth of the native population was checked by the incoming of the foreign elements in such large numbers.

The view that the correspondence referred to was a mere coincidence, purely accidental in origin, is perhaps that most commonly taken. If this be the true explanation, the coincidence is a most remarkable one. In the June number of this magazine, I cited the predictions as to the future population of the country, made by Elkanah Watson, on the basis of the censuses of 1790, 1800, and 1810, while immigration still remained at a minimum. Now let us place together the actual census figures for 1840 and 1850, Watson's estimates for those years, and the foreign arrivals during the preceding decade:

	1840.	1850.
The census,	17,069,453	23,191,876
Watson's estimates,	17,116,526	23,185,368
The difference,	-47,073	+6,508
Foreign arrivals during preceding decade,	599,000	1,713,000

Here we see that, in spite of the arrival of 599,000 foreigners during the period 1830–40, four times as many as had arrived during any preceding decade, the figures of the census coincided closely with the estimate of Watson, based on the growth of population in the pre-immigration era, falling short of it by only 47,073 in a total of 17,000,000; while in 1850 the actual population, in spite of the arrival of 1,713,000 more immigrants, exceeded Watson's estimates by only 6,508 in a total of 23,000,000. Surely, if this correspondence between the increase of the foreign element and the relative decline of the native element is a mere coincidence, it is one of the most astonishing in human history. The actuarial degree of improbability as to a coincidence so close, over a range so vast, I will not undertake to compute.

If, on the other hand, it be alleged that the relation of cause and effect existed between the two phenomena, this might be put in two widely different ways: either that the foreigners came in increasing numbers because the native element was relatively declining, or that the native element failed to maintain its previous rate of increase because the foreigners came in such swarms. What shall we say of the former of these explanations? Does anything more need to be said than that

it is too fine to be the real explanation of a big human fact like this we are considering? To assume that at such a distance in space, in the then state of news-communication and ocean-transportation, and in spite of the ignorance and extreme poverty of the peasantries of Europe from which the immigrants were then generally drawn, there was so exact a degree of knowledge, not only of the fact that the native element here was not keeping up its rate of increase, but also of the precise ratio of that decline, as to enable those peasantries, with or without a mutual understanding, to supply just the numbers necessary to bring our population up to its due proportions, would be little less than laughable. To-day, with quick passages, cheap freights, and ocean cables, there is not a single wholesale trade in the world carried on with this degree of knowledge, or attaining anything like this point of precision in results.

The true explanation of the remarkable fact we are considering I believe to be the last of the three suggested. The access of foreigners, at the time and under the circumstances, constituted a shock to the principle of population among the native element. That principle is always acutely sensitive alike to sentimental and to economic conditions. And it is to be noted, in passing, that not only did the decline in the native element, as a whole, take place in singular correspondence with the excess of foreign arrivals, but it occurred chiefly in just those regions to

which the new-comers most freely resorted.

But what possible reason can be suggested why the incoming of the foreigner should have checked the disposition of the native toward the increase of population at the traditional rate? I answer that the best of good reasons can be assigned. Throughout the north-eastern and northern middle States, into which, during the period under consideration, the new-comers poured in such numbers, the standard of material living, of general intelligence, of social decency, had been singularly high. Life, even at its hardest, had always had its luxuries; the babe had been a thing of beauty, to be delicately nurtured and proudly exhibited; the growing child had been decently dressed, at least for school and church; the house had been kept in order, at whatever cost, the gate hung, the shutters in place, while the

front yard had been made to bloom with simple flowers; the village church, the public school-house, had been the best which the community, with great exertions and sacrifices, could erect Then came the foreigner, making his way into and maintain. the little village, bringing-small blame to him!-not only a vastly lower standard of living, but too often an actual present incapacity even to understand the refinements of life and thought in the community in which he sought a home. Our people had to look upon houses that were mere shells for human habitations, the gate unhung, the shutters flapping or falling, green pools in the yard, babes and young children rolling about half naked or worse, neglected, dirty, unkempt. Was there not in this, sentimental reason strong enough to give a shock to the principle of population? But there was, besides, an economic reason for a check to the native increase. The American shrank from the industrial competition thus thrust upon him. He was unwilling himself to engage in the lowest kind of day labor with these new elements of the population; he was even more unwilling to bring sons and daughters into the world to enter into that competition. For the first time in our history the people of the free States became divided into classes. classes were natives and foreigners. Politically the distinction had only a certain force, which yielded more or less readily under partisan pressure, but socially and industrially that distinction has been a tremendous power, and its chief effects have been wrought upon population. Neither the social companionship nor the industrial competition of the foreigner has, broadly speaking, been welcome to the native.

It hardly needs to be said that the foregoing descriptions are not intended to apply to all of the vast body of immigrants during this period. Thousands came over from good homes; many had had all the advantages of education and culture; some possessed the highest qualities of manhood and citizenship.

But let us proceed with the census. By 1860 the causes operating to reduce the growth of the native element, to which had then manifestly been added the force of important changes in the manner of living, the introduction of more luxurious habits, the influence of city life, and the custom of "boarding," had reached

such a height as, in spite of a still-increasing immigration, to bring the population of the country 310,503 below the estimate. The fearful losses of the civil war and the rapid extension of habits unfavorable to increase of numbers, make any further use of Watson's computations uninstructive, yet still the great fact protrudes through all the subsequent history of our population that the more rapidly foreigners came into the United States, the smaller was the rate of increase, not merely among the native population separately, but throughout the population of the country, as a whole, including the foreigners. The climax of this movement was reached when, during the decade 1880–90, the foreign arrivals rose to the monstrous total of five and a quarter millions (twice what had ever before been known); while yet population, even including this enormous re-enforcement, increased more slowly than in any other period of our

history, except, possibly, that of the great civil war.

If the foregoing views are true, or contain any considerable degree of truth, foreign immigration into this country has, from the time it first assumed large proportions, amounted not to a re-enforcement of our population, but to a replacement of native by foreign stock. That if the foreigners had not come, the native element would long have filled the places the foreigners usurped, I entertain not a doubt. The competency of the American stock to do this it would be absurd to question in the face of such a record as that for 1790 to 1830. During the period from 1830 to 1860 the material conditions of existence in this country were continually becoming more and more favorable to the increase of population from domestic sources. The old man-slaughtering medicine was being driven out of civilized communities; houses were becoming larger; the food and clothing of the people were becoming ampler and better. Nor was the cause which, about 1840 or 1850, began to retard the growth of population here, to be found in the climate which Mr. Clibborne stigmatizes so severely. The climate of the United States has been benign enough to enable us to take the English short-horn and greatly to improve it, as the re-exportation of that animal to England at monstrous prices abundantly proves; to take the English race-horse and to improve him to a degree of

which the startling victories of Parole, Iroquois, and Foxhall afford but a suggestion; to take the English man and to improve him too, adding agility to his strength, making his eye keener and his hand steadier, so that in rowing, in riding, in shooting, and in boxing, the American of pure English stock is to-day the better animal. No! Whatever were the causes which checked the growth of the native population, they were neither physiological nor climatic. They were mainly social and economic; and chief among them was the access of vast hordes of foreign immigrants, bringing with them a standard of living at which our own people revolted.

Opinions may differ widely on the question whether the United States have, as a whole, gained or lost by so extensive a replacement of the native by foreign elements in our population. But whatever view may be taken of the past, no one surely can be enough of an optimist to contemplate without dread the fast rising flood of immigration now setting in upon our shores. During the past ten years, five and a quarter millions of foreigners entered the ports of the United States. We have no assurance that this number may not be doubled in the current decade. Only a small part of these new-comers can read, while the general intelligence of the mass is even below what might be assumed from such a statement. By far the greater part of them are wholly ignorant of our institutions, and, too often, having been brought up in an atmosphere of pure force, they have no sympathy with the political ideas and sentiments which underlie our social organization; often not even the capability of understanding them.

What has just now been said would, of course, have been true in some degree of the body of immigrants in any preceding period. But the immigration of the present time differs unfortunately from that of the past in two important respects. The first is, that the organization of the European railway and the ocean steamship service is now such as to reduce almost to a minimum the energy, courage, intelligence, and pecuniary means required for immigration; a result which is tending to bring to us no longer the more alert and enterprising members of their respective communities, but rather the unlucky, the

thriftless, the worthless. The second characteristic of the immigration of the present, as contrasted with that of the past, is that it is increasingly drawn from the nations of southern and eastern Europe--peoples which have got no great good for themselves out of the race wars of centuries, and out of the unceasing struggle with the hard conditions of nature; peoples that have the least possible adaptation to our political institutions and social life, and that have thus far remained hopelessly upon the lowest plane of industrial life. So broad and straight now is the channel by which this immigration is being conducted to our shores, that there is no reason why every stagnant pool of European population, representing the utterest failures of civilization, the worst defeats in the struggle for existence, the lowest degradation of human nature, should not be completely drained off into the United States. So long as any difference of economic conditions remains in our favor, so long as the least reason appears for the miserable, the broken, the corrupt, the abject, to think that they might be better off here than there, if not in the workshop, then in the workhouse, these Huns, and Poles, and Bohemians, and Russian Jews, and South Italians will continue to come, and to come by millions.

Has not the full time arrived when the people of the United States should set themselves seriously to consider whether the indiscriminate hospitality which has thus far cheerfully been exercised, should not be, at least for a while, withheld, to give the nation opportunity to digest and to assimilate what it has already received; whether justice, if not to ourselves, then to our posterity, does not require that the nation's birthright shall no longer be recklessly squandered; whether we are not under obligations, as the inheritors of a noble political system, to "see to it that the Republic sustains no harm" from an invasion in comparison with which the invasions under which Rome fell were no more than a series of excursion parties? For one, I believe that the United States have, by a whole century of unrestricted hospitality, and especially by taking in five and a quarter millions of foreigners during the past ten years, fully earned the right to say to all the world, "Give us a rest."

FRANCIS A. WALKER.

## THE CHILIAN STRUGGLE FOR LIBERTY.

In 1886 Señor José Manuel Balmaceda, the present dictator of Chili, was elected president of the Republic for a term of five years. During the first two years of his government he followed the honorable traditions and practices of his predecessors, and his administration was regarded as satisfactory. It soon became apparent, however, that fraud and jobbery, until then unknown in Chilian administrations, were becoming every-day occurrences. It was also discovered that President Balmaceda had determined to designate his own successor. A well-filled treasury and the abundant revenues of the Republic proved too strong temptations for the man. He had obtained the highest gift which the nation could bestow; the Constitution did not permit his re-election and his political ambition was satisfied; his one ambition now was to enrich himself. The nitrate beds of Tarapaca, owned by the government, presented the most promising field for speculation. If a rich syndicate could be formed to buy these beds and if a large amount could be distributed among the promoters of the scheme, his ambition would be satisfied, for he intended to be the chief promoter. In order, however, successfully to carry out this project a Congress favorable to its promotion was necessary, as well as a successor who could be depended He could not find a fitter instrument for the consummation of his plan than his confidential agent and broker Señor Enrique Sanfuentes, a man without political experience and with a reputation acquired in questionable transactions.

The candidacy of Señor Sanfuentes now became the one object of his administration. The vast official patronage was made use of to favor this man, and honest officials were dismissed in order to make way for those pledged to support him. The President endeavored to divide the Liberal party in order that the adherents of Sanfuentes might hold the balance of power. His

treachery and intrigues, however, were soon discovered, and the honest men of all parties united in an effort to put down this shameful intervention in electoral matters and to assure a free expression of the people's will in the designation of their candidates. An electoral bill, embodying the principles of the Australian ballot system, was introduced in Congress and passed both chambers; a municipal law, modelled after the New England town system, and calculated to give local independence to the districts, and to educate the people in the principles of self-government, received the almost unanimous support of both houses. Such measures, however, were distasteful to the Presi-

dent, as they were obstacles to his criminal purposes.

In the beginning of the year 1890, the President, ignoring the parliamentary institutions of Chili, as established by the Constitution and observed during 58 years by 19 Congresses and by all previous administrations, taking advantage of the congressional recess, suddenly and without giving any explanation replaced the parliamentary cabinet by one composed of his own This was an attack on national institutions, for Chilian cabinets are of the English type; the ministers are appointed by the President without confirmation by the Senate, and having seats in Congress depend on a parliamentary majority for their existence. In many other ways the President deliberately violated the Constitution, usurping powers which that instrument confers exclusively on Congress or upon the executive and Congress jointly. As soon as Congress met of its own right, in June 1890, both the Senate and the House, by overwhelming majorities, passed a vote of censure upon the Cabinet. The President, however, insisted on maintaining his ministry, claiming that henceforth he would observe the presidential rather than the parliamentary system of government. Congress. exercising a constitutional right, then refused to pass a bill authorizing the collection of taxes until the President should appoint a ministry of honest men. Public opinion was greatly aroused and the press of the whole country denounced the President's course. Disturbance of public order was imminent. Just then news came that the patriotic citizens of the Argentine Republic had deposed their tyrant, and Balmaceda, fearing a like fate, was obliged to yield until such a time as he should consider himself strong enough for a successful coup d'état. He therefore called on Judge Prats of the Supreme Court to form a ministry.

Congress expressed itself as satisfied and abstaining, in the interest of harmony, from impeaching the guilty ministers, passed the tax bills and other administrative measures. This calmed the public mind. The President, however, had not abandoned his criminal designs, and two months later he obliged the ministry of Judge Prats to resign. He now dissolved Congress, which had just assembled in extraordinary session to vote, among other measures, those authorizing public expenditures and fixing the strength of the military and naval contingent for 1891, and named another personal ministry.

The danger of a disturbance of public order now again became imminent; numerous and vehement representations were addressed to the executive by the leading citizens of Chili, by public corporations, and by the press of the country, urging him to respect the Constitution and the will of the people; but all was unavailing. The *Comision Conservadora*, a committee composed of seven senators and seven representatives elected by their respective chambers to act during the recess of Congress, repeatedly called on Balmaceda to summon Congress, but he turned a deaf ear to all patriotic appeals.

By his refusal to summon Congress he rendered it impossible to carry on the government legally; for the Constitution provides that "only by virtue of a law is it permissible to fix annually the strength of the naval and land forces, and to fix annually the expenses of public government." Señor Balmaceda, disregarding these explicit provisions of our fundamental charter, on the 1st of January last issued a manifesto in which he proclaimed himself dictator; declaring that he had been obliged to violate the Constitution and that he would continue to violate it. He furthermore proclaimed:

"I count on the support of the army and navy, who know that I am their constitutional chief, and that they are essentially obedient forces that cannot deliberate."

It mattered not to him that our Constitution provides that no

magistrate or department of the government can, even under the pretext of extraordinary circumstances, arrogate to himself or to

itself other powers than those expressly conferred.

The acts of the President were declared illegal by the Supreme Court of Chili. Congress, in view of them, exercising a constitutional prerogative, deposed him and called upon the people to aid them in putting down the revolutionary government of the Dictator. From the day in which the President closed Congress—the 5th of October—he began active preparations for his coup d'état. The police force was everywhere increased; the officers of the army were obliged to pledge their unconditional support, and in case of refusal were dismissed or imprisoned. Public assemblies were broken up by his police, who shot down the citizens; men of the highest standing were imprisoned without cause; the right of public meeting was taken away. But the people, accustomed to the enjoyment of tranquillity under the rule of honest presidents, did not believe that Balmaceda would dare to trample under foot the Constitution which he had sworn to respect; they did not believe that he would be guilty of high treason to the state.

His courtiers, by their flattery, had led him to believe that he enjoyed great popularity and deluded him into thinking that a coup d'état would not be attended by any disastrous consequences to himself. He believed that Congress would formally protest, and that there might be some slight disturbance of order, which could afford him the excuse that he so eagerly desired for assuming all public power and for banishing the leading men of the opposition. He felt that the rich men who opposed him would never consent to take up arms against his revolutionary government, because they had so much to lose. He did not suspect that a citizen of Chili could love his country; he did not believe that a Chilian could hate tyranny and oppression, or love the constitution under which he had enjoyed the fullest measure of liberty. He seemed to think that personal interest and mercenary motives influenced all citizens as they influenced him.

The citizens of Chili, when called to the defence of their constitution, rallied to the support of Congress. The officers and men of the navy without exception offered their services.

Unfortunately the Chilian soldier is uneducated, by nature brave, but docile and subservient. The enlisted men of the army were bribed into supporting the Dictator. They obeyed the orders of hireling officers and everywhere prevented the unarmed citizens from rising in support of Congress. Yet all the leading generals and a large majority of the officers of the regular army are to-day fighting for their country's cause in the army that supports Congress, though the Dictator at once trebled the salaries of his soldiers and offered bribes to those who would desert the congressional side.

As soon as the navy declared against him, the Dictator published a decree assuming all public authority, and suspended all laws which might embarrass the exercise of his power. He suspended the newspapers and destroyed the presses. The Supreme Court set at liberty citizens who had been illegally imprisoned, but he refused to obey its mandates. It then declared his acts illegal and unconstitutional, whereupon he closed all the courts.

The property of members of Congress and leading citizens was in many cases pillaged and destroyed; that of others was confiscated. Judges, senators, and representatives were imprisoned; ladies and gentlemen were subjected to torture and indignity. The London "Times," referring editorially to these atrocities, says:

"He has shrunk from no severity and no brutality in dealing with the upholders of constitutional rights. It is impossible to ignore accusations formally made from many different quarters. There is a body of evidence to show that, whatever be the constitutional aspects of the quarrel, it has been fought on Balmaceda's part with absolute unscrupulousness and unflinching cruelty."

In order to give his government some semblance of legality he abrogated the electoral laws, and the members of Congress were declared to be no longer in the exercise of their legislative function, although they still held, by constitutional right, the charge confided to them by the electors. He then ordered elections to be held for a so-called constituent assembly in order to reform the Constitution, which nobody but himself had violated.

It is absurd to suppose that, in a country governed by martial law, with no courts and no press, a lawful election can be

held. Our laws provide that the courts shall decide on the valulity of elections. At the elections ordered by Balmaceda there was no opposition, consequently the candidates which he designated were unanimously chosen, as he claims. There is no better proof of the illegality of this Congress than that which its members have given by their abject servility to the tyrant. Its first act was to legalize the criminal acts of the Dictator, and to divest itself of all legislative attributes in order to clothe him with unlimited and irresponsible authority. This very condonation of the Dictator's acts is a virtual admission of their illegality. The bill passed provides that the President of the Republic shall be invested with the following extraordinary powers: "That of arresting, transporting, and banishing persons; that of extending the public revenue without being subject to estimates; that of declaring the territory of the Republic in a state of siege; that of suspending or limiting the right of meeting and the liberty of the press." Such a bill needs no comments.

Although struggling under great disadvantages, the party of Congress now holds the territory extending from the northern boundary of Chili to the 29th degree of south latitude. This territory comprises the four richest provinces, constituting one half the territory of the Republic, and vielding two thirds of the yearly revenue. There is a regularly established government in the form of a Junta composed of Don Waldo Silva, vice-president of the senate, Don R. Barros Luco, president of the chamber of deputies, and Don J. Montt, commander of the navy. This Junta has been organized since last April, and has a regular cabinet. From a military point of view the congressional government is certainly as strong as that of Balmaceda. It has a welldisciplined army and a navy that is vastly superior to that of the Dictator. Throughout the territory governed by Congress there is peace and tranquillity; the courts of law suppressed by order of the Dictator have been reinstated, and every citizen enjoys the fullest liberty. Under the Dictator's régime of brute force, on the contrary, there is outrage and persecution. The courts of law have been closed and there is a veritable reign of terror.

The government of the congressional party is an organization sufficiently regular and responsible to command the respect of

foreigners as well as of Chilians. It maintains commercial relations with all the nations of the world. It holds in peaceful and undisputed possession one half the territory of Chili, yielding more than two thirds of the revenue of the whole country. The portion of Chili under congressional control, in virtue of its population, its resources, and the character of its government, is entitled to be considered a state, for it has demonstrated its ability to discharge the duties of one. Its government has the support of all Chilians of character and intelligence.

This government, then, possesses all the elements and conditions which international law deems necessary to a recognition of belligerency by foreign powers, and when these conditions exist, authorities on international law claim that "belligerency ought not only to be conceded, but ought not to be withheld." Besides, the Dictator has virtually recognized the belligerency of the congressional government by issuing a decree declaring the ports in its possession closed to foreign commerce. Our sister republic, Bolivia, some time ago recognized the belligerency of the congressional government.

The present revolution has very distinctly drawn the line between the honest and patriotic citizens who desire their country's good and those who, rather than to be thwarted in their schemes of personal enrichment, prefer their country's ruin. The patriotic citizens of Chili will make no compromises with those who have robbed their country of her peace and her good name; their task will not be ended until they shall have established constitutional government throughout the land and assured liberty to every citizen of the Republic.

RICARDO L. TRUMBULL.

## LITERATURE IN THE MARKET-PLACE.

THE recent wide and prolonged discussion of the question of copyright has thrust into great prominence the commercial motive in literature. It was a necessary incident of this agitation that authors should be represented chiefly as men in business, since the law affects them only as they offer books for sale. The ethical ground taken was that the laborer is worthy of his hire. Whether as a profession or as a trade, literature was regarded as a means of gain. All this is somewhat out of consonance with old traditions of the literary life. It is true that the noted saying that "the man who does not write for money is a fool" is more than a century old, and its promulgation by Dr. Johnson marked the beginning of new conditions in literary production; on the other hand the soon-cured reluctance of Byron to take pay for his poetry marked the end of the earlier feeling —the aristocratic prejudice, if you will—against making a trade of the nobler uses of great faculties in thought and imagination. But there still remains a middle ground between these two extremes, an ethics in the practice of literature, and it is probable that only a few authors of distinction in this century would admit that the pecuniary reward had much to do with their own writing. It has been argued that the widening of the market for books of American authors, by securing to them an equal chance with foreign authors in our own country and also remuneration for their sales abroad, would tend to increase the quantity of our production and to better the quality of popular reading. In other words the strengthening of the commercial motive, which is the practical change effected by the law, is relied upon to give an impulse to American literature. Without raising any question of the existence of a right of property in literature, certainly as just as many forms of private ownership, and without doubting the expediency of the rule that authors should live, as other social workers do, by pay for their service to the

community, one may inquire whether the importance assigned to the financial aspect of the matter has not been exaggerated, and examine in general the influence of the trade spirit in literature with a view to its actual results. The law may be both just and wise, and yet its effects in the encouragement of literature may have been imperfectly forecast.

The copyright law, however, is referred to here only incidentally. It is proposed in this paper to glance at some conditions of the production of our current literature, which the law may aggravate or ameliorate but which exist independently of it. The commercial motive has long been acting on our literary producers. What are its effects? Do they show that writing for money is a practical method of creating literature that shall be an historic possession of the nation and a final depository of its renown, the lasting record of its higher civilization—that of the mind and the heart—age by age? Of such literature we have now but a minimum; can we look to the commercial motive to secure its production? It would be, perhaps, unfair to do more than recall the fact that great literatures hitherto have been little indebted to the desire for gain, and that nations and communities, distinguished by the spirit of trade, have been often conspicuously deficient in literary genius. Our civilization is a commercial one throughout the world to a degree which makes the present a new age. Money itself is more regarded, and its possession implies also the control of public and private opportunities, and the individual distinction even, which were once rather in the gift of rank and fame than of riches; and hence the commercial motive is of wider range and is, besides, freed appreciably from degrading associations. It may be that the change in general social conditions is so great and works in such complex ways, that past experience is an unsafe ground for inference. Copyright may yet rival patent-right in its results. It is, however, uncertain how far patent-right is to be credited with the progress of invention made possible by disinterested scientific discovery and made necessary by the growth of society without regard to who should receive the incidental profit. It is plain that thus far the hire of the laborer has been, to say the least, of mixed good and evil in literature.

Mr. Walter Besant has lately given it as his opinion that Dr. Johnson, with whom the dependence of literature on the book-trade began, made a better living by his hack-work than he would have gained in any other profession. Really large returns were not obtained from the book-sellers until the next generation. Sir Walter Scott received considerable sums, and he wrote his novels with these in view. He is a conspicuous example of a man who sought money without contracting any sordidness in his moral habit. Byron is the other instance of striking pecuniary success in that generation. Many other authors, who did not make fortunes, were well paid in the same period, and as the century advanced the writing of fiction in particular became one of the roads to a competency or even to comparative wealth. It remains, nevertheless, generally true that the literary career in the strict sense is still an unprofitable one, involving much self-denial in its earlier years and a success, if success be won, often long deferred. The two great poets of the age, Tennyson and Browning, are illustrative cases. Carlyle, in prose, is another example. It is not likely that any of the really great authors of the century, from Sir Walter Scott on, would have failed to write their works, though all these had been as unsalable as those of Wordsworth, Shelley, or Hawthorne. They were men of genius to whom expression was a necessity of their nature. The commercial motive was not a governing one in their lives, and, except in the making of fiction, was little felt. Sir Walter, Thackeray and Dickens, and George Eliot stand in the position, as regards this matter, of Shakespeare; whether he wrote for money will always be a mooted question, but the possession of genius implies its exercise, and it is rational to think that the great English story-tellers, both in drama and romance, would have told their tale of life just as those of ancient and mediæval times did before them, whether their purses were filled or left empty. The money value of fiction at present supplies a strong external motive, and each decade now is strewn with reputations of failure in consequence. The internal impulse must first exist if greatness is to be achieved, and is of itself enough. Victor Hugo made a fortune, but the fortune had no hand in making him; day and

night are the same to the volcano—it is irrepressible; with or without wages he would have done his work, like Cervantes.

It is well to insist on the lack of any necessary relation between the great works of literature and the money they may or may not earn for their authors, for the point is a cardinal one in any forecast of our own national fortune in letters. It serves in this place to mark off the limit within which the commercial motive does operate with some mastery over the result. The new thing in literary conditions in this century is the rise and increase of the reading public, infinitely varied in what it seeks and vast in its numbers, but not widely sensitive to pure literature. The whole mass of books which aim to spread information, all the ever-multiplying series of scientific works, literary biographies, history manuals, collections of standard authors of the past, selected poetry and prose, the exhaustless library of travel—in a word, the literature of knowledge for the people all this, broadly speaking, is produced for a price. The demand is an opportunity for publishers and writers to make money, and the supply follows the demand. The commercial motive in this region often blends with an enlightened desire among the educated class to spread knowledge for its own sake as an element of civilization. Nevertheless, it is a market that is stocked in the process for value received. The literature of popular knowledge, however, is strictly limited in its character; it must be, so far as it goes, the same for the lowest as for the highest intellect, and one with the truth as it has been written by the best authority. There is no opportunity for any sinister influence, except so far as incompetent writers may be employed for the sake of cheapness, and this seldom occurs.

The case is wholly different when the literature of popular amusement is approached. Here the observer comes at once upon that numerous body of readers which has been named the Unknown Public; it lies outside of the ordinary literary field and is as strange to reputed men of letters as their works are to it. It is not an uncommon experience to one well informed in regard to current literature to pick up from time to time a magazine, paper, or book of which he never heard, and to find that it has thousands of readers; the authors' names are unknown

to him, their subjects and methods are strange; the whole complexion of the thing is of a different world. Occasionally some one makes an excursion into this new province, added to our literary domain, and reports what he has found of the taste and morals prevailing there; and what we learn breaks on our routine of thought and feeling very much as the applause of the gallery-gods does at the theatre. This literature is altogether too vaguely within our view to be discussed. It has been said in the copyright agitation that much of it is of English origin, and will be unable to stand against the competition of a better American kind. One thing may be affirmed of it with certainty; it is all written for money. And if English writers have been found, who in their own country have produced for a similar class of readers among their countrymen work of this sort, what reason is there to believe that American writers will not also be found to produce the same thing under copyright here for the price that suffices there? It seems erroneous to think that this reading public prefers what is called "good literature" to what it already pays for, and takes the latter merely because it is cheaper. Cheap editions of what educated men suppose would infallibly appeal to this public have been issued, and the choice could not be bettered; but the editions remained unsold. There is a demand for just that sort of reading which is now taken in vast quantities, and it will infallibly be satisfied until the taste changes. Is it doubtful that it is already being satisfied by American writers who are ready to do more of the same kind for the same wages? Such publications are a part of the booktrade; they are commercially valuable; the copyright law, at best, has only raised the price—perhaps not even that.

Somewhat nearer to us than this nameless literature of which the manufacture goes on unnoticed by the journals of literary opinion and without the knowledge of the educated class, are the books which win great popular success. They are clearly within range. The names that lead the rest readily occur—Ouida, Roe, Lew Wallace, Albert Ross, Bellamy, and more at will. The great sale that all or some of the works of these authors have had, is proof of a multitude of readers in each case; and there is such variety in the five mentioned that it is fair to

infer that no one of them exhausts more than a portion of the general market. Roe and Ross probably compete very little with each other, and each numbers his readers by the hundred thousands; Ouida and Bellamy are likewise far apart; but the readers of Lew Wallace are, in large masses, the same with those of Bellamy and Roe. The audiences of these writers are the Asiatic provinces of literature, mere numbers; and hence the supply of this market embodies in the strongest form the commercial motive. Each author stands for a distinct type of novel and group of ideas and sympathies, and in their works may be found reflected widely prevailing moods of the people. Each has been imitated to a greater or less degree. It is sufficient at present to remark only upon two, Lew Wallace and Albert Ross. To the first is due the religious school of fiction, which shows no signs of becoming barren, and on the contrary may long continue; the school which usually turns the gospels into sensational novels, but sometimes resorts to the Old Testament for its plots. It presents a curious return of popular taste to the old miracle-play, as unlikely a reversion as could have been dreamed of. Taken age for age with the change of civilization, our time, in finding interest in a Biblical novel, repeats the period of the religious drama, and occasionally the latterday story is as crude, comparatively, as was the earlier play, as coarse in its feeling and as revolting in its action. Lew Wallace, learning from Kingsley and Victor Hugo certain literary effects, wrote a tale that was at least powerful in adventure, scene-painting, and the feeling for humanity; it had force, though somewhat rudely exercised; and, if its attraction was at times a meretricious glitter, there was also much besides to hold and fasten the mind by the energy of great ideas in which the Christian world is built. If the actual reverence of the reader was not offended and his sense of artistic propriety was not violated, there is no room to wonder that he enjoyed the tale and felt it deeply. But, while to say this is justly due to the author, it is impossible to make any similar allowance for the imitations to which his example gave rise; they are only degradations of the sacred story. The works of Albert Ross are of a very different order. It is not surprising that one almost involuntarily says

that, if this is what the people prefer to read, it were better had they never learned their letters. Such a feeling can be only momentary, but it is natural. As it is better that a man should vote though he vote for a scoundrel, it is better that he should read though he read bad books. The literature of the seventh commandment has not hitherto flourished in communities of English blood either in the crude or the developed form of tiction; but it is certainly increasing on the book-stalls, and it is widely read. It is not long ago that the plea was made by one of those who regret the limitations imposed on the English novel that since we are to have such stories by inferior authors and in their most unliterary form, it would be better to have them by masters of the art in the French taste. This is the same error as that involved in the expectation that a better American sort of popular reading will force out of the market the English wares already referred to. The public which demands the inferior kind will not take the better, if produced. An American Guy de Maupassant would not compete with Saltus or any other of the authors in this part of the field. These books are seldom mentioned in our journals or magazines, except when advertised; they are published and circulated silently; so far as criticism is concerned, they are ignored; but they are read. In addition to these two classes of novels, which are comparatively recent and still multiplying, any one at all acquainted with current literature can easily recall the sort of fiction that has been most eagerly absorbed by the public in very large editions during recent years. The five authors who have been named not unfairly represent its good and evil. They have received large sums for their works, and with the exception of Bellamy, the commercial motive was as strong in their cases as in any in our day; other motives were present, no doubt; but the noticeable thing is that, from the point of view of trade, this is the sort of literature which has brought the largest immediate returns.

A more interesting, though not more important branch of the general subject, and the last which will here be touched upon, is the influence of the magazines, which to a considerable degree are the paymasters of authors both young and old. The matter is more complicated in respect to these, but one or two promi-

nent features can be made out. The earlier reviews, the great quarterlies of the first half of the century, certainly gave to their contemporaries the best intellectual opinion of the day, and they gave to literature the essay as Macaulay conceived it in England and as Lowell wrote it among ourselves. The great popular magazines of to-day, vast as is their beneficent influence among the people, both for knowledge and for entertainment, have done nothing so notable as that, in pure literature. The "Atlantic" has an honorable record of new authors encouraged under its editorship in years past, and of established authors sustained in a high standard and brought more before the public. The other magazines have given us the dialect story in particular, and the short story in general; that is to say, this form of literature has been forced under the demand made for it, and with more or less perfection of execution it chiefly characterizes the literary product of the time. They have also fostered light verse, and especially those French metrical forms in which a young man of talent can most easily make the least of himself. The general tendency of all later magazine writing, both in verse and prose, is toward the momentary, the striking, the epigrammatic, phases and incidents at the most, and bon mot and bric-à-trac at the least. Only their literature is here spoken of, and that element in them is, except for fiction, a subordinate one. Is it not, in consequence, due to the magazines mainly that our literature is of what has been aptly styled the "cherry-stone" type? Cherry-stone literature most admirable, no doubt; but the best in this kind are but trifles, though they be now and then immortal. The magazines have some powerful attractions which, in connection with this topic, should not be forgotten. It is in their power to give an unknown writer a large audience at once, without his having earned the right to be listened to; the mere insertion of his name in the table of contents gives a kind of notoriety, insures mention in many papers and advertisements, and, in short, puts the machinery of journalistic fame at his service for the time being. The press, too, in its eagerness for personal news and the taxing of all resources to fill its issues, gives material aid in the spread of this notoriety, such as it is. It was never so easy as now for an author to be named in print

irrespective of what he has done. He is known, if his works are not. For this the magazines are chiefly responsible, not by choice but by the necessity of the case. The natural desire of a writer for a great body of readers and for personal reputation is thus satisfied at once, and, as the magazine is his easiest road to these ends, he is willing to submit to its conditions almost without a thought; besides, if he needs money, there is the best counter for him to go to, and the cherry-stone, in story, essay, or poem, is most sure of quick purchase. So far as the working of the commercial motive is illustrated by the magazines in other departments than literature there is no question but that it secures the most authoritative knowledge in the most portable and interesting form, and parallels the service done by the same motive in the book-literature of popular knowledge. But so far as literature in the strict sense is concerned, it does not appear that the necessary conditions of a magazine for general circulation permit much substantial encouragement of it. On the contrary, if we judge by the results of the last score of years, it would seem that the magazines tend rather to emasculate literary talent by directing it to small things, except in fiction, and even in that department the influence is in the same direction.

If these generalizations upon a very broad and complex subject have any validity it must be concluded that writing for money would lead rather to hack-work for the nameless trade of the Unknown Public; or to emulation of those who must be called our literary demagogues, often no doubt sincere, as political demagogues also are-Ouida, Roe, Lew Wallace, Albert Ross, and Bellamy; or to contributing to magazines under conditions highly unfavorable to literature of a great kind. In other words, it must be thought that the commercial motive cannot be relied upon to secure literature important enough to be called national. The fact is that the book-trade, like other branches of business, consults the taste of its customers and seeks to please the largest number. The reading public is now such, so far as can be judged, that the mass of readers is too imperfectly cultivated to impose such standards, either in matter or style, as would make a national literature of the first order. Our national life has been rather of the Roman cast. Our great achievements have been

political, military, and engineering. Our renown rests on these. Our literature has been incidental; but, modest as it is, it is much cared for by a considerable and influential part of the people. It will be welcomed in the future as it has been in the past; but great authors must still be content to write from the inner impulse and to wait for their fortunes, without much care for the money that may be gained. The notion that the copyright law will make any appreciable difference is probably a mistaken one. The increase of gain from foreign sales will be very slight, except in the case of genius, and then it will come only after the time of struggle, when encouragement is no longer needed. Copyright is justice—that is all, and that is enough. The cloud of argument, arising from other grounds, that has gathered about it may have served a purpose; there is no reason why it should longer obscure the main issue. The ground of justice is one from which advance can still be made; the ground of expediency, once admitted, ends in inevitable compromise. So far as, in the course of the agitation, it has been made to appear that literature which has greatness in it, for the author and the nation, is dependent on pecuniary gain, a little more or a little less, or is encouraged by the strengthening of the commercial motive, the argument is not only fallacious, but at the present time rather works against our chances of literature than for them. At the best this motive has operated to give us in late years humor and fiction, characteristic, it is true, but unprofitable in proportion to its excellence, and in no instance recognized with certainty to belong to the literature that lasts beyond its generation. No one well acquainted with the conditions now · ruling would feel free to advise any youth, however talented, to trust to literature for his living; the chances are many against one that he would find his grave in journalism. On the other hand no one would hesitate to tell him that a condition precedent to his success in contributing to the literature of his country, even if he had genius, is to throw away all thought of money in the present, to refuse to work for it unless it comes in his way of work, and especially to resist the temptation of a little success for a little thing.

GEORGE E. WOODBERRY.

## PROFITS OF FRUIT-CULTURE IN CALIFORNIA.

THE missionary fathers planted fruit trees and grape vines in California contemporaneously with the founding of religious and educational institutions, but merely to supply the domestic demand, and it is only within a comparatively few years that fruitculture has been engaged in there for revenue. Its importance as a source of wealth is now fully appreciated, and its development henceforth will be very great. The fruits that are successfully grown in California are the apple, the apricot, the peach, the pear, the plum, the prune, the nectarine, the cherry, the fig. the olive, the guava, the loquat, the orange, the lemon, the lime, all the berries, grapes for the table, for raisins, and for wines, the English walnut, and the almond. These fruits do not grow equally well in every locality, and some of them are confined to particular sections. In common parlance, fruits in California are divided into two classes, the deciduous and the citrous, and for convenience they will be thus designated in this article.

Fruit-culture began in the middle portion of the State; that portion first attracted immigration. It had San Francisco for a shipping point and the Sacramento River for transportation. It has numerous rich valleys and extensive plains, it was first connected by rail with the East, and it has been more densely peopled than any other section. Naturally development and diversification of products took place earlier there than elsewhere, and therefore in all kinds of fruit to which it is adapted, it takes the lead. The citrous fruits are not successfully grown there, and cannot be, except in a few limited and favored spots, but it is claimed that the climate and soil of that part of the State give it advantages over any other section in the production of all the deciduous fruits, berries, and grapes. There can be no doubt that the people of that section practise superior methods of cultivation, and have been more careful in picking, pack-

ing, preserving, and shipping their fruits than those of southern California. Their products have acquired a better name in the markets, and are more widely known; and it may be that that section of the State is best adapted to growing many kinds of fruit. But the success that has followed the efforts made in the southern part of the State within the last two years has immensely increased expectations and given strong evidence that southern California can successfully compete with the central section in growing most, if not all, classes of deciduous fruits.

The Tehachapi range of mountains may be regarded as the northern boundary of what is called the "citrous belt." Southern California, as commonly understood, comprises six counties: Santa Barbara, Ventura, Los Angeles, Orange, San Bernardino, and San Diego. The climate is sui generis, and in giving range to productions it is perhaps superior to that of any other country in the world lying in the same latitude. The Tehachapi range connects the Sierra Nevada with the Coast Range and extends to the sea. For 200 miles on the coast, and for distances inland varying from a few miles to 80 miles, the country is open to the sea breezes. The winds are monsoons and blow from the north-west during the summer and from the south and southeast in the winter, modifying the temperature properly in all There are no frosts that do appreciable damage, and it is never oppressively hot. The climate is especially adapted to growing the citrous fruits, the fig, the guava, the walnut, and the almond.

The soil of California in valleys and upon "mesas" contains mineral and vegetable fertilizers that have for ages been washed down from the mountains. Its richness is almost phenomenal, and it has borne all kinds of crops so abundantly and so long that many Californians believe that its fertility cannot be exhausted. But it is, of course, not of the same strength or depth in all localities. The belief in its inexhaustibility has led to imperfect cultivation, and to the growing of such continuous crops that production has not been as great as it might have been. Vineyards have borne for a hundred years in some cases without replanting and without fertilization. Deciduous fruit orchards are rarely enriched; until within the last 10 or 15 years orange

groves were not fertilized, and the fertilization of many of them is still neglected. As it is apparent that fruit will in the early future become the greatest source of profit, the people are studying methods of cultivation, are beginning to utilize all the means of developing production to the utmost, and are making use not only of manures produced in the country but of all valuable and available commercial fertilizers, with excellent results. Soil and climate are so favorable that the fruit crop never fails, though the yield is not always the same, and on the average

profits are eminently satisfactory.

As is well known, California has its wet season and its dry season, and water for purposes of irrigation is an important matter to be considered. It is necessary only in the production of certain kinds of fruit. The deciduous fruit trees are not irrigated, as a rule, and they bear fruit as abundantly and of better flavor without it. In selecting a place for peaches, apricots, prunes, apples, cherries, pears, nectarines, or figs, only soil and climate need to be regarded. The wine grape has more sugar without irrigation, and it is asserted by men of experience in wine-production that a good article cannot be produced with irrigation, but the muscat or raisin grape vine must have water during the dry season in order to insure a large yield and a good quality. Absence of fogs or moisture in the atmosphere is essential during the drying season. Fresno and other localities in the San Joaquin valley are especially adapted to raisin-culture on account of a rich soil, abundance of water, and the dryness of the atmosphere in the latter part of the summer and early autumn. The same is true of El Cajon valley in San Diego County, of Hesperia, and generally of San Bernardino, and of a portion of Los Angeles County. The walnut tree requires some irrigation unless it be planted in moist land where the water is near the surface. The cost of producing the deciduous fruits is small, and the net profit is large. The fig tree is a profuse and constant bearer and requires very little attention. The peach, the apricot, the prune, the pear, the cherry, and the nectarine begin bearing very early. The walnut is of slower growth and does not produce in large quantity till the tree is from 15 to 18 years old, but its longevity exceeds that of the other deciduous

trees. All the berries yield abundantly, but they require liberal irrigation.

Citrous trees require generous irrigation and a deep, rich soil. Experience in other countries demonstrates that they flourish best in a stiff loam or calcareous marl intermingled with vegetable humus. The citrous tree, being evergreen and returning but little that it takes from the soil, is extremely exhaustive of fertility. It requires intelligent and thorough cultivation and liberal fertilization. It is generous when well treated, but revengeful when neglected. The longevity of the orange tree is very great. There are trees in the Old World that are reported to be centuries old and are still bearing. The seedling does not reach its highest bearing state till it is 40 or 50 years old, and it thereafter continues from 50 to 80 years with undiminished power. The budded trees, such as the navels and bloods, are more precocious and, reasoning from a general rule, it is supposed that they do not last so long. However that may be, a young man of twenty-one who plants an orange orchard will have a comfortable income after six or eight years, and thereafter it will be princely during his life and the life of his children. olive flourishes in southern California, but its cultivation as yet is limited. Great success has attended the efforts of Mr. Elwood Cooper, of Santa Barbara, and the Kimball Brothers, of San Diego County. Very little pickling has been done, the bulk of the fruit being used in making oil.

Profits from the cultivation of fruits of nearly all kinds have been and are very large, but as yet some of them, such as the fig, the walnut, the lemon, and the lime, have been but little developed. Numerous general statements which seem marvellous have been published, showing how much of the various kinds of fruit has been produced per acre. In order that facts may be stated, I have communicated with growers in various parts of the State, asking exact information, that all localities may be impartially represented.

The Hon. J. F. Crank, of Lamanda Park, Los Angeles County, who has 250 acres of wine-grape vines, says that for several years past his vineyard has netted him \$100 per acre, and this is a common result in all parts of the State where wine

grapes are grown. The raisin yields a profit in Fresno, San Diego, San Bernardino, and Los Angeles Counties of from \$150 to \$400 per acre, when the vines are in full bearing. It costs more to produce the raisin grape than the wine grape. Walnut orchards yield from \$200 to \$400 per acre when the trees are 18 or 20 years old. Mr. James Stuart, of Downey, Los Angeles County, has received every year for the last four years \$600 net for figs grown upon 72 trees, of which 108 are planted to the acre. I received \$150 for the lemons from one third of an acre; and they were not cured but sold to local dealers. Similar results have been achieved in San Diego, Orange, San Bernardino, and elsewhere in Los Angeles County. Last season Mr. C. C. Thompson, of Pasadena, sold his fruit from 38 acres of peaches. apricots, and prunes, for \$9,294, the cost of production being \$1,000. In another case in Pasadena, about which I personally know, the peaches from one and a half acres sold for \$500 on the trees. Last year Major Chase in El Cajon valley, San Diego County, received \$2,600 from five and a half acres of prune trees, and the cost of production and preparation for market was \$300. From 16 acres of apricots Mr. Stratton, of Azusa, last year received \$7,300 after paying the cost of producing and preserving for market.

Governor Markham received \$350 from one acre of orange trees in South Pasadena in 1889—the fourth bearing year and the cost of production was \$26. In the same year Mr. James Smith, of Pasadena, received \$1,810 net, for oranges produced on three and one third acres. Mr. A. B. Chapman, at Chapman, for the crop of last year on five acres, received \$500 per acre. Mr. C. O. Monroe, of Monrovia, for last season's crop grown on three and three fourths acres, received \$1,775 net. Mr. J. A. Graves, of Alhambra, raised last season on eight acres 7,000 boxes of oranges, which he sold for \$1.35 per box; and 184 trees yielded Mr. F. Q. Story \$4 per tree, 120 trees to the acre. Judge E. M. Ross received for his last crop produced on somewhat more than 50 acres at Glendale an average of \$500 per acre, net. These cases are all in Los Angeles County. Mr. Frank P. Morrison, of Redlands, San Bernardino County, received for the last year's crop \$900 per acre, and the Hon. Scipio Craig

says that seedling orchards in that county will average \$400 to \$500 per acre. Riverside is the most celebrated place for orange production in the State. Receipts per acre have been as high as \$1,200, and \$400 and upward are not uncommon. Similar results have been achieved at Anaheim, Orange, and Tustin, in Orange County; at Duarte, Pomona, and Vernon, in Los Angeles County; and also in San Diego, though orange culture is yet limited in that country.

Cases may be cited in great numbers where large profits have been realized. It is customary to claim that certain localities are especially favored on account of soil and climate, but results show that there are hundreds of places in California where fruits are grown with substantially the same success. Differences in results are due in part to climate and soil, but more to erroneous selection of varieties and to defective methods of cultivation. Time will very soon demonstrate that no locality has a monopoly of superior natural conditions. The cases cited do exaggerate general results if the production of all orchards and vineyards is considered, for there are many which have suffered from neglect or from unintelligent management. If the figures given in specific cases are reduced one half, no one will maintain that they would then be above the average of general results; and, if that be the rule upon which judgment is formed, it will yet be undeniable that profits from fruit-culture in California exceed anything that has been or can be achieved elsewhere in the country in agricultural or horticultural production.

I am unable, with the data at command, fully to state the quantities of fruits produced in California. There are no figures showing the extent of local consumption, or even accurately all that is exported. Considerable quantities are carried away by sea, but the ports from which shipments are made are so numerous that it would be almost impossible to arrive at exactness. From the new port of Redondo Beach alone 1,443 tons were shipped in 1890. Most of the fruit, however, is carried out of the State by rail, by the Southern Pacific and the Santa Fé roads. As the latter road has no line north of Mohave, its shipments are confined to points in southern California. The tonnage of the former road, for 1889 and 1890, was as follows:

North of M	North of Mohave.		South of Mohave.		
1889. Tons.	1890. Tons.	1889. Tons.	1890. Tons.		
Citrous fruits	72	11,088	9,943		
Deciduous fruits, green, 24,351	25,735	73	527		
Dried fruits, except raisins, 15,888	19,560	678	2,424		
Canned fruits,	42,529	758	1,362		
Raisins, 7,816	13,665	969	888		
Nuts, 411	188	350	598		

The Santa Fé road carried out of the State the following quantities for the years 1889 and 1890, and for the first six months of 1891, from each of the four Southern counties:

	San Diego.		San Bernardino.			
	1889. Tons.	1890. Tons.	1891 (6 months). Tons.	1889. Tons.	1890. 1 Tons.	891 (6 months). Tons.
Citrous fruits,	$10\frac{1}{2}$	231	95	3,475	5,495	6,856
Green and dried fruits,	60	264	12	480	2,040	24
Raisins,	84	900	46	2,280	2,952	108
Walnuts,		• •	• •		24	• •
	Los Angeles.		Orange.			
	1889. Cons.	1890. Tons.	1891 (6 months). Tons.	1889. Tons.	1890. 1 Tons.	891 (6 months), Tons.
Citrous fruits,	2,940	1,806	4,998	787	693	1,654
Green and dried fruits,	72	1,764	680	167	168	12
Raisins,	24	108		72	12	
Walnuts,	262	252		12.	24	

During the speculative excitement in southern California, which terminated in 1888, little attention was given to fruit-culture. Lands were purchased to a considerable extent by non-residents for speculative purposes, and the collapse of the "boom" left many residents inextricably involved in debt. The result was that discouragement prevailed, and it was not till 1890 that the people put forth efforts to recuperate by agriculture or horticulture. Many orchards and vineyards had been neglected. A better feeling now prevails, and a change of conditions has been wrought. The spirit of speculation has been replaced by a determination to enhance values by the development of resources through cultivation. New orchards and vineyards have been extensively planted, and evidences of prosperity prevail on every hand. The early future will disclose an immense increase in fruit-production.

No enemy of the apricot, the nectarine, the prune, the fig, the guava, the walnut, or the several kinds of berries has yet appeared. In some localities the grape vine has been afflicted with a disease which has done considerable damage, but the opinion prevails that it is disappearing. Peaches, pears, and plums have enemies, but these are easily and inexpensively disposed of. A few years ago enemies of the citrous fruits were imported, whose ravages were disastrous in some localities. They are the so-called red and white scales. The latter have been completely exterminated by the Australian lady-bird, or vedalia cardinalis, imported by the Agricultural Department. The red scale is rapidly disappearing through the effect of spraying, and in some localities through the work of a parasite which has made its appearance. This pest is now regarded as trifling; at any rate it does not deter the people from making vigorous efforts in planting citrous orchards. That there are enemies of fruit trees should not therefore disparage fruit-culture in California. No valuable productions of the earth are exempt from foes. The world has been searched in vain for a place where they do not exist, and, so far as we are informed, no such spot has ever been heard of except the Garden of Eden. No part of the country where fruit of any kind is grown has suffered as little from pests as California.

The great increase of fruit-production within the last few years has raised the question in the minds of some whether there is not danger of over-production in the early future, to such an extent that prices will be so reduced as to leave no margin for profit. In proportion to the value of land and to the expense of production, profits hitherto have been enormous, and there can be a large reduction in prices before the fruit industry will cease to be remunerative. At the present time the production is far less than the demand. There are a few kinds of fruit that may be produced in excess of consumption, such as apples, pears, and the berries that are grown in all parts of the country. The peach is popular the country over; it is not generally produced in abundance everywhere, and the area where it is successfully grown is diminishing continually. Though prunes are raised in several sections, still we are importing quantities

from foreign countries. The apricot, the fig, the raisin, the grape, and the walnut are grown in very few places except the southern half of California, and the same is true of the olive. The wine grape is cultivated with success in few and restricted districts outside of this State. California is already regarded as the France of America, and her wines not only find favor at home, but are sold in quantities in several European countries. In the United States oranges and lemons are produced only in California and Florida. The orange crop of the latter is practically out of the way before that of the former is ready for the market. The California orange is of slower growth than the Florida product and does not decay so soon. The orange season in California lasts five months, beginning January first, and it will be prolonged in future, as the people are planting Valencia oranges, which do not ripen till July. The lemon is more sensitive to frost than the orange, and it is produced with more difficulty in Florida than in southern California for the reason that the former State is more subject to frost. It is a fruit extensively consumed, and domestic production is hardly a tithe of our consumption. The wide range of productions in California operates as a check upon over-production in any one thing. If too much of one kind is produced, and too little of another, it is easy to change from one to the other, or the people can resort to growing grain and vegetables. It is not as if productions were limited in range

There can be no doubt that fruit-production in California will increase out of proportion to the increase of population, but this is not a proper rule for calculating future demand. Consumption per capita will be larger; for by continued use luxuries are converted into necessaries. The time is not distant when fruit of some kind upon the table will be deemed as essential to good living as sugar. Abundance also stimulates efforts to find new markets and to extend trade. There are millions of people in the United States who only occasionally see oranges, and there are still more who do not use fruit as a regular article of food. Americans are the greatest consumers in the world; and producers, dealers, and transporters will exert themselves to place fruits within the reach of all.

If prices are reduced in the future there will be some compensation for the loss. The orchards and vineyards will then have reached full bearing condition and the yield will generally be much greater without corresponding increase in the cost of production. Transportation rates should be materially reduced as tonnage increases, for volume of traffic is an important item to be considered in determining the reasonableness of the carrier's compensation.

Californians have large ideas on the subject of profits, because they have been accustomed to those which are inordinate. What in other countries would be regarded as princely they are likely to look upon as moderate, and perhaps as unsatisfactory. Ideas may have to be modified and results estimated from a new point of view. Prices can be materially reduced and still leave a margin for satisfactory profits. When fruitculture becomes non-remunerative it will be time to be discouraged; but that will not occur within the lifetime of the present generation, and probably it will never occur. There is every inducement to double our efforts, for they will be amply rewarded in money and will confer a blessing upon mankind.

LIONEL A. SHELDON.

## DOES PUBLIC LIFE GIVE LONG CAREERS?

The attitude of the recent Republican State convention in Ohio toward John Sherman raises the question whether his party will give the veteran leader another term in the Senate, if it has the chance. The incident suggests an inquiry as to the general subject of the stability of public life. What is the likelihood that a young man, with an ambition for a career as a public man, will be able to realize it? How does our treatment of public men compare with their treatment by our fathers?

The colonies inherited from England the tradition that the conduct of public affairs should be committed to a class of men who had shown especial qualifications for the task and had been trained for it; and that such men, when they had proved their fitness, should be kept in office indefinitely. This was particularly true of New England. In Connecticut a man who once entered the Legislature was likely to be returned by his townsmen year after year if he cut a creditable figure at the capitol. Jedediah Strong, of Litchfield, was elected to that body in 1771, and sat in it for thirty regular sessions thereafter, as he doubtless might have continued to do still longer if he had not fallen into bad habits. During this same period Caleb Strong, of Northampton, Mass., served as county attorney from 1776 to 1800, meanwhile being also a member of the State council in 1780, State senator from 1780 to 1789, and United States senator from 1789 to 1796.

In like manner the governor was apt to be given a long tenure of the office by successive re-elections. John Hancock was chief executive of Massachusetts from 1780 to 1785, and again, after an interval of two years, from 1787 until his death in 1793; while Caleb Strong filled the chair from 1800 to 1807, and again from 1812 to 1816. In Connecticut the people kept the first Jonathan Trumbull in the governor's chair from 1769 until he resigned in 1783; in 1798 they elected his son Jonathan

to this office, and it became so much of a habit with them to do the same thing every year that it really seemed as if he had a life tenure of the place when he died in 1809. Again and again New Hampshire called John Langdon to her highest office, his terms covering the years 1788–90, 1805–09, and 1810–12. In Vermont Isaac Tichenor served as governor continuously from 1797 to 1807, and again during 1808 and 1809.

Such men were usually college graduates (Tichenor had taken the course at Princeton, and Hancock, Strong, and the two Trumbulls at Harvard) and had made a study of the science of government, very much as the clergy had made a study of theology. The common people were educated to the idea that training was essential in a statesman, and they regarded the high official as belonging to a class no less distinct from themselves than the clergy. In fact, the common people in many of the States had little to do with the choice of their rulers. The right of suffrage in New York was limited to free-holders, and in Massachusetts a property qualification of £60 was essential.

With the departure from the stage of the generation which carried through the Revolution and established the new government, a change came over the public mind. The poorer classes demanded that their lack of wealth should not debar them from exercising the suffrage, and property tests for the ballot went down before this demand. It was now established that "one man was as good as another" at the polls. The next step was easy and inevitable. If one man were as well qualified for the suffrage as another, why not as fit to hold office? The rise of Andrew Jackson to the presidency represented perfectly and appropriately this growing sentiment among the masses. Until his day every one of the chief executives had been a trained statesman, who reached the highest office in the nation as the culmination of a long career in public life. Jackson's accession meant the development of the idea that government was not an art which one could master only by hard study and long experience, but that it was something which came almost as easily as voting.

The old theory had tended to keep the statesman long in office, just as it was the custom to retain the clergyman in his

church for life. Such individuals as Strong and Trumbull were regarded as men who were infinitely better qualified to govern Massachusetts and Connecticut than Smith or Brown, and therefore it seemed obviously the best policy to keep them in the executive chair year after year. But when it came to be accepted as a fact that Smith or Brown was really as fit to be governor as Strong or Trumbull, it naturally followed that neither Smith nor Brown had any claim to hold the office long. In truth, it seemed only fair that Jones and Robinson should also be given a chance, and the shorter the time that Smith and Brown served, the better would be the opportunities of the rest.

The doctrine of "rotation in office" was everywhere preached. Its advocates skilfully played upon the public fear that the servant might assume to be greater than the master, and cunningly argued that this must prove the case if the same man were kept in office term after term. The plea may be found well put in an editorial article which appeared in the Richmond, Va., "Enquirer" during the autumn of 1822, when members of Congress were to be chosen. The editor admitted that, "if men were incorruptible in their nature, no matter how long or how remote their employment from the people, longer practice in their various posts would only improve their dexterity and usefulness in service." But unfortunately the drift, in his opinion, was the other way; like streams which have flowed far from their native fountains, "they cease to partake of their original simplicity and purity, and become open to the influence of every new combination, pure or impure, which may assail them through their various assailable points." After pointing out the mischiefs which must thus result, the article proceeded: "Can any better plan be devised to prevent this than a frequent recurrence of public servants to the nature and condition of their constituents? Let our members of Congress be changed; let them be changed often."

So generally sensible a man as Hezekiah Niles endorsed this argument most heartily in his "Weekly Register." In support of it he quoted this remark made to him by "a pure-hearted, strong-minded Republican [Democratic] member of Congress" in Washington several years before:

"I am entirely convinced that every member of Congress ought to go out at the end of four years and be ineligible for two succeeding years—for the fact is that, in spite of all we can do, the very best men among us become more or less impressed with opinions not conformable to that of the people, and we act as though the people were their own worst enemies, requiring our wisdom and grace to prevent them from harming themselves, so that the creature assumes the power of the creator."

All of which Mr. Niles pronounced "as true as the Gospel."

Another influence arose about this time to strengthen the tendency toward rotation in office. This was the development of the spoils system, which followed the passage in 1820 of the law fixing a four years' term for a large number of officers whose tenure had previously been during good behavior, and making them removable at the pleasure of the president. This law rendered possible the "clean sweep" policy. When Jackson became president he declared, in his first message to Congress, that "rotation is a leading principle in the Republican [Democratic] creed," and he put in practice the theory openly enunciated by Marcy in the Senate, that "to the victor belong the spoils of the enemy." The judiciary of most of the States did not escape the demoralizing influence of this doctrine. The rule had been to appoint judges who should hold their places during good behavior. It now became the practice to elect them by popular vote, and only for short terms. The life tenure of Federal judges could hardly have escaped assault but for the fact that the constitution provides that they "shall hold their offices during good behavior." Jefferson, indeed, went so far, toward the close of his life, as to advocate a change by which judges should be appointed for only four or six years, a fresh nomination by the president and confirmation by the Senate to be essential to a renewal. His fear was that these Federal judges, "responsible to no authority (for impeachment is not even a scare-crow)," might proceed to "the annihilation of constitutional state rights, and the removal of every check, every counterpoise to the ingulfing power of which themselves are to make a sovereign part." His argument for the short term was that it "will bring their conduct, at regular periods, under revision and probation, and may keep them in equipoise between the general and special government."

New York and other northern States accepted rotation in office, and the spoils system into which it so naturally fitted, far more heartily than the South. The very year that the Richmond "Enquirer" was preaching the doctrine so vigorously Virginia re-elected to Congress 18 out of 22 representatives, five of the 18 being then in their third terms, while five others had served in from five to eleven Congresses. The same year New York gave another term to only eight of her 27 congressmen, and but one of the eight was beyond his second term. One explanation of the difference between the two sections in this respect is the fact that restrictions upon the suffrage continued in the South much longer than in the North, Virginia not abolishing the property test until 1850 and South Carolina retaining it until the civil war. Even where they voted, the poorer classes exerted far less influence upon the course of politics than in the North. Moreover, the leaders of public opinion in the South were quick to see the immense advantage which length of service gives one man over another in Congress when all other things are equal. They perceived that training and experience would go far to make their minority of numbers a match in real effectiveness, for a majority which was constantly changing in composition. The result was that, of South Carolina's six representatives in the last ante-bellum Congress, two were serving their fourth terms, and one his sixth; while of Virginia's twelve, one had been elected three times, two four times, two six times, and one seven times. The contrast between the two sections was thus pointedly characterized by James Russell Lowell in one of his political essays published during the war:

"Owing to the wretched policy (if supineness deserve the name) largely prevalent in the North, of sending to the lower house of Congress the men who needed rather than those who ought to go there—men without the responsibility or the independence which only established reputation, social position, long converse with great questions, or native strength of character can give—and to the habit of looking on a seat in the national legislature more as the reward for partisan activity than as imposing a service of the highest nature, so that representatives were changed as often as there were new political debts to pay or cliques to be conciliated—owing to these things, the South maintained an easy superiority at Washington, and learned to measure the Free States by men who represented their weakest, and sometimes their least honorable, characteristics."

The war did not shake the traditions of the South regarding the wisdom of this policy. As soon as the reconstruction era ended and the Democrats again came into control, they resumed the practice of sending their leading men to the national capital and keeping them there for long terms. In not a few cases these were men who had begun a congressional career before the war, as in the case of John H. Reagan of Texas, who was a member of the House in the Thirty-fifth and Thirty-sixth Congresses, and after serving as postmaster-general of the Confederacy, resumed his old seat at Washington in the Forty-fourth Congress, was given twelve years in the House and was promoted in 1887 to the Senate. Of the eleven representatives from Mr. Reagan's State in the Fifty-first Congress two had been elected three times apiece and two others four times in succession, while one was completing his eighth consecutive term, and another his ninth. Mississippi had seven representatives, of whom three were serving their third terms and one was serving his sixth. Of the five from Arkansas one had been elected three times, and three four times. Georgia had ten seats in the House, and of her representatives in the last Congress one was serving his third term, two their fourth, two their fifth, and one his ninth.

The North has learned wisdom from the South in this respect, although the average length of service of the northern representatives in Congress is still far less than that of the southern. This is, to be sure, partly due to the fact that there are many more close districts in the North than in the South, but more largely to the survival in some States of the belief that an office is an honor to be passed around among a large number of men, rather than a trust to be given to the man best fitted to use it for the general good. There has been a marked difference in this matter between States and between cities—particularly between the metropolis and Philadelphia. New York City makes frequent changes in her congressmen, while of the five members elected from Philadelphia to the last Congress one had served 10 years, another 16, the third 24, the fourth (Samuel J. Randall) 26, and the fifth (William D. Kelley) 28. Some of the smaller States have learned that they may make their influence stand in inverse ratio to their numbers by keeping the same representatives for long periods. Each of Vermont's two members in the last Congress was serving his fourth term. Of Maine's four, two were members for the fourth time, one for the fifth, and one for the seventh time. On the other hand, of the eight from New York City four were serving their first terms, and none of the other four had been members of more than one previous Congress.

As regards the Senate, there has been a pronounced growth of sentiment in favor of re-electing an incumbent, during the quarter of a century since the war. Twenty-five States (not counting the newly-fledged commonwealths) chose senators for the term beginning on the 4th of March, 1891. In five States there had been a change in party control of the Legislature, and in two cases incumbents had declined a re-election by reason of age or ill health. Of the remaining 18 only two failed to be returned. It was the second term of six years for which five had been chosen; the third election for six; the fourth for four; and the fifth for one. Two years before, 26 senators were elected. In two States there had been a political revolution, and in a third the incumbent declined an assured re-election. Only two of the remaining 23 were denied a re-election. Nine were given a third term, and one a fourth. Mississippi, under her new constitution, holds State elections only once in four years, and the Legislature to be chosen next November will dispose of both the senatorships. One of the incumbents is serving his second term, and the other his third. The canvass has already progressed far enough to show a general disposition in their party to re-elect both.

There has been a reaction of late years from the popular demand of a half-century ago for short judicial terms. Both New York and Pennsylvania, which in 1846 and 1850 respectively reduced the tenure from good behavior to eight years, have extended the term, the former to 14 years and the latter to 21. Massachusetts has never wavered from the system of appointing judges for life, and no State has a more creditable judicial record. The same system is now confessed, after a full century's experience, to have worked so well in the case of the Federal judiciary that nobody would think of proposing any change, even if change could be made more easily than by

amending the Constitution. The idea which Jefferson suggested in 1822, of cutting down the term of such judges to four or six years, would be received to-day with mingled ridicule and abhorrence. The successful operation of life tenure on the Federal bench, and wherever it has been adopted in the States, encourages those who would make this the rule throughout the country. One step in that direction which many States are taking is to re-elect a faithful judge at the end of his term, often by the united vote of the two political parties.

At the other end of the office-holding line there has been an even more notable development. The "clean sweep" of the spoils system was based upon the theory that there ought to be a change in the lowest office whenever there was one in the highest; that the clerks in a Washington department or the carriers of the New York post office should be turned out if the party which had appointed them lost the presidential election; that a new administration could not "carry out its policy" unless it put in men of its own faith to add columns of figures, stamp letters, and distribute mail matter. The Civil Service Law, which has now been in successful operation for eight years, has exposed the absurdity of this theory. The nation is already growing accustomed to the sight of many thousands of Washington clerks performing their utterly non-political tasks with equal zeal whether a Republican or a Democrat sits in the White The business man of New York no more expects the government to turn out an efficient mail carrier because a new president has come in, than he would expect to change his office boy for the same reason. The range of places covered by the law steadily widens, until the total number now exceeds 32,000. The sphere of its operation is extending so as to affect higher grades of employees. While there is still much abuse of the system among professional politicians, its bitterest enemy no longer has any hope that the law will ever be repealed. On the contrary, no candid person, who has studied the drift of public sentiment and watched the action of national administrations during the past ten years, can doubt that a steadily growing proportion of the government's subordinate employees will be assured the tenure of good behavior.

John Sherman is the most striking example of the stability of public life in our day. He went from Ohio to Washington as a member of the House of Representatives in 1855, continued in that body until 1861, served in the Senate from that time until 1877, was secretary of the treasury for the next four years, returned to the Senate in 1881, has been re-elected once since, and, when his present term expires in 1893, will have held office at the national capital continuously for 38 years, without being considered by anybody too old to begin another six years' term at the age of seventy. Justin S. Morrill entered the House from Vermont the same day with Mr. Sherman, served 12 years in that branch, and has completed his twenty-fourth year in the Senate, with another term just awarded him by his State at the age of eighty. Henry L. Dawes, of Massachusetts, joined Sherman and Morrill on the floor of the House in 1857, remained in that branch for 18 years, and will complete another 18 years in the Senate with the expiration of his present term in 1893. Although Mr. Dawes reached Washington two years later than Mr. Sherman and Mr. Morrill, he had, unlike them, already held office repeatedly in his State, so that his public life is really much the longest, dating back to his election to the Legislature in 1848, and with only a break of a single year (1851) covering the entire period of 43 years since then. So, too, George F. Edmunds entered the Vermont Legislature in 1854, a year before his long-time colleague, Mr. Morrill, took his seat in Congress, and he was a member of one or other branch of that body seven of the twelve years before he went, in 1866, to the Senate, where he undoubtedly might remain indefinitely if he would consent to serve. The resignation of Mr. Edmunds closes a record which was already without a precedent—the representation of a commonwealth in the Senate by the same two men for a continuous period of 24 years—with the result that their small State has long held the chairmanships of the two most important committees, on finance and on the judiciary.

The South would match the longest records of the North but for the break caused by the war and the disabilities under which so many of her most prominent men labored during the reconstruction era. John H. Reagan entered Congress with Mr.

Dawes in 1857, but he had been a deputy surveyor of public lands as far back as 1839, and served in that capacity, as member of the Legislature, or as judge, half of the 18 years from 1839 until 1857; while he has held office, either at Washington or under the Confederate government, all of the time since 1857, except from 1865 to 1875, while the Republicans were in power in Texas. Isham G. Harris was elected to the Tennessee Legislature in 1847, the year before Mr. Dawes went to "the Great and General Court" of Massachusetts; began four years' service in the lower branch of Congress in 1849; became governor in 1857, and filled three terms of two years; and returned to Congress, this time in the upper branch, in 1877. He is now serving a third term, which will not end until 1895. Zebulon B. Vance, of North Carolina, was sworn in as a member of the House of Representatives at Washington the same day with Dawes and Reagan in 1857, after having been elected county attorney in 1852 and member of the Legislature in 1854; he served as congressman until his State seceded in 1861, and was its "war governor" from 1862 until the Federal authorities assumed control; he claimed an election to the United States Senate in 1870, but the Republican majority would not concede him the seat; he was again elected governor in 1876; in 1879 he went to the Senate with indisputable credentials, and he was recently re-elected for the term ending in 1897. His colleague, Matt W. Ransom, entered public life the same year, being elected in 1852 attorney-general of North Carolina, in which office he served three years; was a member of the Legislature in 1858, 1859, and 1860; was elected to the United States Senate two years later than Mr. Vance, but was more fortunate in immediately securing the seat; has served continuously since 1872, and is now upon a term which will not expire until 1895. the 76 members of the Senate from the older States when the Fifty-first Congress met, ten had served in that body continuously for 12 years, two for 14, three for 16, one for 17, one for 22, and one for 23 years, not counting Sherman and two or three others who had been senators and then had dropped out to return later.

All of the present tendencies are in the direction of greater

stability in public life. The man who enters a Washington department through one of the lowest clerkships, after passing a competitive examination, can count upon keeping his place indefinitely if he continues efficient, with the prospect of promotion to higher grades from time to time. The man who aspires to a congressional career, if he once secures an election to the House from a district controlled by his party, may in most of the States expect a series of re-elections as the reward of conspicuous merit, with the chance of some day changing his seat to the Senate chamber. Even if he reaches the upper branch rather late in life, he will not find his age an insurmountable obstacle to his long continuance in a body which contains several members who have been chosen to new terms after reaching seventy. The man who would leave a name as a judge may reasonably hope that, if he reaches the bench of an inferior court, he will not suddenly be turned adrift after a brief term, but that he will be advanced to higher rank as vacancies occur, and so be able to spend all his active years in the employment which he would most enjoy. In short, the Republic seems to be steadily recovering from its strange delusion that public life is the one occupation in the world where experience is of no value, and where the best service is to be secured by the most frequent changes.

EDWARD P. CLARK.

## THE GREATHEAD UNDERGROUND ELECTRIC RAILWAY.

On November 4, 1890, there was opened with much ceremony in London a subterranean railway, carrying passengers from the Monument in the city to the Swan in South Lambeth, a distance of about three and a half miles, and at a depth of between 40 and 60 feet below the surface of the streets. This road is called the City and South London Railway. It is composed of two tunnels, which in their course underlie the River Thames, and pass under the mammoth Hibernia Wharf warehouses, the abutments of London Bridge, and the massive viaducts of the Southeastern Railway. The mode of traction is electricity, which at the same time serves to light the carriages and the stations.

When Mr. James H. Greathead, the inventor of the system of tunneling which is known by his name, proposed this line from London Bridge through the densely populated portions of the southern or Surrey side of London, and succeeded in obtaining the indorsement of Sir John Fowler and Sir Benjamin Baker, two of the leading engineers of England, he had, notwithstanding this indorsement, to fight, at the outset, many very serious difficulties in the way of inducing capital to enter into the project and of obtaining the necessary parliamentary concessions for the work of construction in the metropolis of London.

The old underground railway system of London, although carrying an enormous traffic, had not been a financial success. It is also a constant source of complaint to its patrons by reason of the offensive odors which permeate the tunnel, and its dampness and draughtiness. The traction of the old underground railway of London is by steam locomotives; and however successful the smoke-consuming contrivances of the engines, they cannot destroy wholly the emanations of ashes, and sulphurous gases of various kinds, which arise from the decomposition and direct consumption of coal, this being of necessity bituminous, as England has

no anthracite coal. The contents of gas pipes, sewer pipes, and water-service pipes, all of which are more or less leaky, saturate and drench the brick arches of the old underground railway system of London with unwholesome moistures and smells, each brick being a lung which takes in and inhales this moisture and these odors from surrounding material and exudes and exhales them into the tunnel. These were the main reasons that caused Londoners and the English Parliament to be reluctant to extend a system of subways which in one form or another were open to such strong objections.

Mr. Greathead was compelled, therefore, to prove theoretically to both Parliament and the capitalists of England that his system overcame these objections, one and all, before he could obtain either concession or cash. That accomplished, he, for two and a half years, proceeded to build his road; and from the first day of its opening, on November 4, 1890, until the present day, every train has passed through the tunnel successfully, and, with trivial exceptions, on time. The passage of the first train demonstrated the validity of the inventor's claims before Parliament in behalf of this intermural system of rapid transit, and of its superiority over every other system yet devised, as a means of moving daily the population of a great city from one point to another. Every successive train brushed aside objections and objectors until at present there is a consensus of opinion, in England at least, that the solution of the question of rapid transit for cities has been found.

Given a built-up city with its lines of traffic and intercommunication already established, a new system which is to supplement and, in part, replace the existing lines, should meet six serious and important requirements:

(1) During construction, there must be no opening of streets to interfere with existing traffic; (2) in its operation, it must not impede existing means of traffic, by carriage, omnibus, street cars, and the like; (3) it must do little or no damage to property during its construction and by reason of its operation; (4) it must, when in operation, be a wholesome and pleasant means of transit; (5) it must be rapid; and (6) it must pay its projectors and promoters.

The Greathead system of tunnelling places the tunnel so far

below the streets and houses of the city that the land occupied by it is of no value practically, and but of nominal value theoretically. There is no warehouse in any large city the cellars or foundations of which go 60 feet below the surface of the street. The land, therefore, that is occupied is wholly additional space recovered from the domain of no value and made of great value for this special purpose. The very depth at which the work proceeds makes it impracticable, after the sinking of the first shaft, that there should be one continuous open cut from the surface down; the road must be driven through the bowels of the earth. On the surface there is as little indication of its progress as was observable on the fields of the St. Gothard mountain, by the shepherds who fed their flocks thereon, of the advance of the St. Gothard tunnel, thousands of feet below their sabots.

The tunnel is circular, is driven through sand, clay, gravel, or rock, by instruments specially devised for such purpose, and is constructed after the opening is made, of sections of rings bolted and riveted together, with tarred rope to fill up the interstices. An inch and a half of grouting surrounds the whole outer surface left vacant by the cutting shield as it advances, making one uniform coating of Roman cement around this iron tube, which, when completed, is thereby forever protected from all gases or water percolating through the earth. Moisture, which heretofore has been an enemy to tunnelling operations, is, by Greathead's system, made a friend, which, at the moment he strikes it, he sets to work as a water shovel by building a diaphragm behind it, and then sucks the gravel, clay, or silt through his pumps and pipes to the surface. The surface openings are made in the interior of dwellings or warehouses which are purchased at different points and which ultimately become the entrances to the stations; therefrom the shafts are sunk and the levels driven after the shafts have reached their proper depth, precisely as in deep mining. The work proceeds without consciousness on the part of the people who use the streets that it has been going on, until the place which before was used for the purpose of removing the waste and of introducing the material necessary for construction, is converted into a beautiful passenger station. Into this station great hydraulic elevators, capable of holding 75 persons each, are introduced, and carry passengers from the street to the depth of 60 feet or more and back again to the thoroughfare. More technically speaking, the manner of construction is about as follows: After a proper depth for the tunnels has been ascertained, a shaft is sunk and solidly bricked around. From this shaft the tunnels are started. The tunnel headings are side by side, or one above the other, as the ground and other circumstances favor, and are continued a sufficient distance to permit of the introduction of the hydraulic shield. (The City and South London tunnels are each a little more than ten feet six inches in diameter.) A dozen or more such tunnel-headings may be working from various sections toward each other to expedite construction. The shield consists of an iron tube of rather more than the full dimensions of the exterior of the tunnel tube, so as to slide over it like the cap of a telescope. In the rear of this shield there are built up two or three rings of the tunnel, formed of segments 20 inches in length, each ring being bolted to the next by a flange three inches in depth, and the outer space between the exterior of the iron tube and the excavation being filled with concrete, blown through small orifices in the tube. The shield carries, in circular arrangement within it, six or eight hydraulic presses, and when the pressure water is pumped into them their rams protrude against the flange of the last ring of the tunnel tube, and the shield is driven forward, its sharp edge cutting away another eighteen inches of the material to be displaced, and permitting the insertion behind it of another tube-ring built up from within. heading in front of the shield is driven by hand, as in ordinary mining; but where water is encountered, a portion of the tunnel is built off by a diaphragm, with a door in it, in the rear of the shield. Again, in the rear of this a second diaphragm with a door is built. In this way the iron tunnel tube is laid and built in rings in regular consecutive order.

As fast as a segment ring of the tunnel is completed, it is thoroughly and compactly grouted. For this purpose a grouting machine is used. A grouting composition made of Roman cement is mixed in this machine and forced, under an air pressure of 30 pounds, through small holes in the cast-iron segments,

into the vacancies left around the tunnel by the shield. Beginning at the bottom, the cement is forced to the outside until it shows at holes in the side. Then the lower holes are permanently plugged and the cement is forced through the side holes until it flows in at the top; and finally it is forced through the top holes until no more can be forced through. By this means a solid casing, impenetrable to water, or even to gas, is secured. It serves more perfectly than a sheathing of solid masonry to protect the tunnel from moisture and to stiffen and sustain it.

The cars are supplied with longitudinal seats, lit by electricity, and luxuriously cushioned, the passengers facing each other. The locomotive is an electric motor, picking up its electricity from a central rail through which the electric current is conducted by a copper wire; and inasmuch as, for each track, there is a separate tunnel only a trifle larger than the train (which fills almost the whole of the annular space, except only at stations) each train acts as a piston, driving out, from station to station, the air through which the preceding train has passed. The stations are connected with the open air and are not more than three-quarters of a mile apart; any foul air which gathers in the tunnel is thus expelled by each passing train. Indeed, the air in the tunnel is of a more equable temperature, and is kept more constantly moved and freshened, than the air on the surface; and frequently on dark and murky days it has been noticed that the air and atmosphere, strange as it may appear, are far more pleasant in the tunnel than on the street surface.

In building two tunnels, running into each other only for station service, they can be superimposed or put side by side, as the exigency of the ground may demand; no more is taken out of the earth than is necessary for the purpose of building the tunnel, and whatever substance is removed is immediately replaced by material of at least ten times its resisting strength, and much lighter in weight. Every interstice between the outer surface of the iron rings and the rock or soil is filled with Roman cement, so that there is not the slightest danger of settling or displacement, either in the case of dwellings or of warehouses, no matter how huge the structure or how great the weight. The support given by the tunnel is at least ten times as great as that ren-

dered by the material which has been removed; and whether the work proceeds under Trinity Church, or under a squatter's hovel, there can be no disturbance of the premises overhead.

While the City and South London Railway was under construction, the members of the Board of Municipal Control expressed their desire to be notified when the work approached the viaduet of the Southeastern Railway, so that their engineers might aid in devising a scheme for supporting the great abutments so as not to have their foundations disturbed; greatly to their surprise they found that the tunnel had already proceeded half a mile beyond the viaduet without its being known to them that the work was going on. Indeed, Mr. Greathead made the extraordinary statement that, in the whole progress of the work of three and a half miles, he was not compelled to pay one single penny of compensation for disturbance of foundations, though his tunnel ran under some of the largest and most substantial structures, including London Bridge, viaduets, great railway stations, and warehouses.

The condition being fulfilled that the tunnel be absolutely water and air tight, compliance with the fourth requirement (of wholesomeness) follows as a matter of course, provided that the motor itself and the tunnel in itself do not create noxious and unwholesome gases. The old underground railway of London was, and still is, lighted by gas. The ordinary illuminating gas of itself vitiates the atmosphere. The new tunnel is lighted by electricity; therefore this element of atmospheric vitiation is removed. In the old tunnel every car was, and still is, lighted by oil lamps, another source of vitiation of atmosphere in the cars themselves; in the new tunnel the cars are lighted by electricity, a pure and wholesome light, independently of its vast superiority as an illuminant. In the old tunnel the motor is a steam locomotive, consuming soft coal, and ejecting unpleasant and unwholesome vapors into the air, notwithstanding that the smokeconsuming apparatus of the engine has worked with reasonable success. The old tunnel is neither gas-proof nor water-proof; no brick tunnel can be. The new tunnel is far below and away from the communal services of a great city, such as water pipes, gas pipes, sewer service, and steam pipes; it sheds, by the method of its construction, all moisture that seeks to enter, and prevents the possibility of any leakage of gaseous vapors. The only opening to the surface is at the stations, through special ventilating shafts there erected, and through the natural ventilation caused by elevators and staircases. There can, therefore, be no air in the tunnel except that which comes direct from the streets, and this is kept in constant circulation by each train, as has been explained.

The rate of transit on the City and South London Railway is from 22 to 25 miles an hour—from three to four times as rapid as that attained on the elevated railroads of New York, except by express trains. A transit of 22 miles an hour, including stoppages, within a radius of 11 miles, assuming the City Hall in New York to be the centre of the radius, would bring 125th Street within 25 minutes' distance from the City Hall, and Washington Heights and West Farms within a half hour. For all practical purposes this system is rapid enough to meet the requirements of the most nervous, labor-loving, and dollar-chasing American citizen.

The success of the system thus introduced by Mr. Greathead and his friends in London, has been so marked that four similar projects have been immediately started, and one of these is now under way. Its projectors intend to build a very long line, the traffic of which will be somewhat analogous to that of the City of New York. This route, to be known as the Central London Railway, has just been authorized by Parliament, and its capital has been eagerly subscribed. The line runs from residential London, on the north side of Hyde Park, West End, and Bayswater, under new Oxford Street, past the Marble Arch, through old Oxford Street to Holborn, under the Holborn Viaduct to the Mansion House and Royal Exchange. In addition to this, in the other large cities of England, steps have already been taken which indicate that within a very short time the Greathead system will be practically the only popular intermural rapid-transit system in England. The question of the adequacy of electrical traction has been successfully solved in the first of these Greathead tunnels. The rapid improvements made, even since last November, in the construction of the engines leaves no room for question that any train of the weight and character of those which are carried on the elevated roads, with an equal load of passengers, can be moved by electric motors with greater rapidity, with greater salety, and with greater comfort in these tunnels than on the surface or elevated lines. The inhabitants of American cities have been in some sense fortunate that a combination of circumstances—some even arising from pernicious causes—has heretofore prevented the adoption of any intermural rapid-transit systems, which in the past would have been from necessity somewhat analogous to the old London underground railway. It required a combination of the genius of a civil engineer like Greathead with the latest inventions and improvements devised by a succession of electrical engineers, to bring together a method of construction and a system of traction which, for the present at least, and probably for many years to come, will prove to be the adequate and satisfactory system of rapid transit for large cities.

The question of cost, however, is another element to be considered before any system of intermural transit may be regarded as feasible. In this matter the Greathead system, unless compared with one that filches its right of way and then trusts to the chances of litigation to escape from the consequences, offers many advantages over every other. In the first place, it occupies space not hitherto available for any other purpose and therefore of little or no value. Secondly, although the cost of construction is higher than that of an elevated railroad through a street for the occupancy of which little or no payment has been made, its cost of maintenance is so slight as compared with the cost of maintenance of such an elevated structure (which is practically a bridge, and which, to be safe, must be renewed in all its parts in the course of one decade) that the amount available for interest payment and dividends is larger—or, in other words, the net cost of operation is smaller—by the Greathead plan than by any other.

When the project of the Central London Railway, which is constructing and is to be operated on this system, was before the House of Lords for final sanction, at one of its sessions in June, 1891, Mr. Hamilton Smith, managing director of the exploration company, asserted that this railway would carry from 25,000,

000 to 30,000,000 passengers a year; and the "Daily Telegraph," in its issue of June 26, 1891, agrees with him in saying that this and the further estimate that in five or six years this number would, in all probability, be doubled, was not an exaggeration. In speaking of this system in the same editorial, the "Telegraph" says that the decision of the Lords' Committee (virtually the sanction of Parliament) in approving the bill marked the commencement of a new era in the history of Metropolitan intermural communication.

"It is the first step toward the establishment of that direct railway system which this City of Magnificent Distances [speaking of London] needs more than any other in the world, but for which it has had to wait for so many years. For the first time in his life the resident will cease to be restricted by means of communication from one Metropolitan point to another which, when direct, was not rapid, and, when rapid, was not direct."

The writer goes on to say that he looks forward with confidence to the time when many such lines will be established:

"Trains running noiselessly at many feet below the pavements, with no din to bewilder the passenger and no sulphuretted vapor to suffocate him and to poison the upper air through a 'blow-hole,' will present a far more engaging picture to the imagination, besides appealing far less unpleasantly to the senses, than the existing Metropolitan railway service. It will go some way to realize the ideal which the world's capital ought to set before itself in this matter."

This editorial expression applies with great force to New York. The existing means of transit are inadequate to move even the present population; therefore some new road must be constructed, and that at once. Present methods, for reasons too obvious to mention, will not be chosen to supply this public need. The soil of the city of New York, and the great value of real estate therein, the multitudinous service pipes which underlie our streets without system or regularity, the enormous traffic which is done upon them, are all causes combining to make the Greathead system the best adapted for purposes of rapid transit on Manhattan Island. It can go under the most important avenues and the most valuable houses without opening a single highway during construction, and without disturbance of foundations, occupying space of little or no value below the surface, notwithstandingthe great value of the land but a few feet above the tunnels.

It is suggested that the Greathead system, while admirably adapted to clay, silt, sand, or other soft material, is ill adapted to the rock that underlies our island from Fourteenth street northward to above the Central Park, and that in such rock the old system of tunnelling, without lining or with brick arches, must he resorted to. This is a misconception. There is scarcely a continuous hundred feet of the rock underlying the city of New York free from natural fissures. It has also been so blasted, excavated, and disturbed at every point, that, independently of natural fissures, any number of clefts have been created by blastings, to establish streets, to build foundations of houses, and to lay sewers and gas and water mains. The consequence, were the rock excavation under the sewers, steam, gas, and water pipes to be without a gas-proof and water-proof lining, would be that the tunnel would become filled with moisture precisely as though it were in soft material, with the difference that the water and moisture lying in fissures would be under pressure and therefore more dangerous to a brick or rock-lined tunnel than if in clay, silt, sand, or gravel; and the pump would have to be kept at work constantly to eject exudations of the watery filth of a great city, unless the tunnel were constructed through the New York rock by the Greathead system.

There is, therefore, nothing in the nature of the material on which New York City stands which in the slightest degree interferes with the adoption of the Greathead system of tunnelling, if its citizens wish to secure the most perfect system of rapid transit now known.

SIMON STERNE.

## A NEW ROUTE TO THE NORTH POLE.

SINCE interest in the polar regions was first aroused by the search for the northwest and the northeast passages, there has been no lack of explorers ready to venture their lives to reach the North Pole itself. Attempt after attempt has been made, but all have failed, though our knowledge of the Arctic regions has slowly but surely advanced until it now has reached latitude 83° 24' north—the point gained by Lockwood in May, 1882.

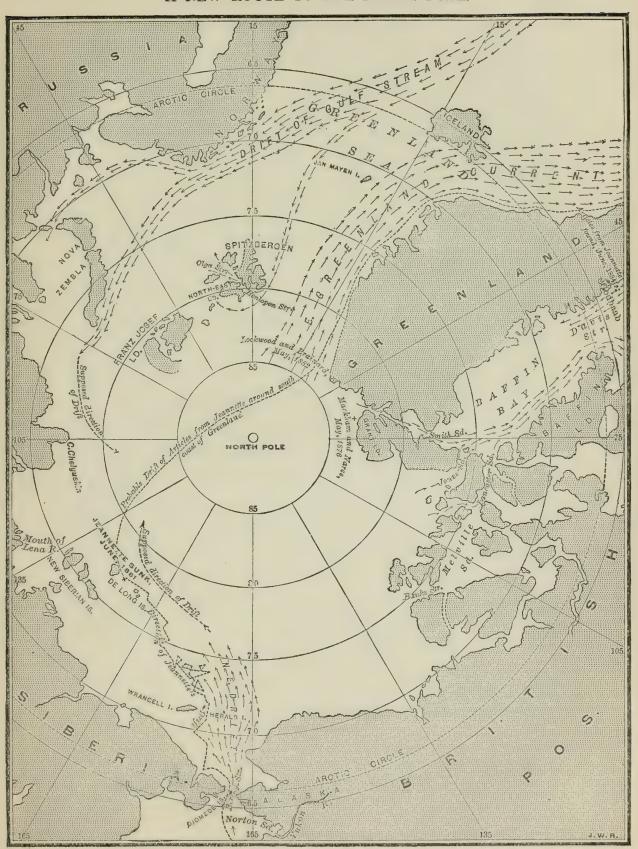
But why did all previous attempts fail? The reason is simple enough. The expeditions were everywhere, at a greater or less distance from the Pole, stopped by the drifting floe-ice which formed immense impenetrable masses and in most cases was carried down against the ships by currents from the north. Many bold sailors dreamt fantastic dreams about an open polar sea behind this ice barrier, but such speculations were of no use. It was impossible to penetrate the ice, and to walk over it was not much easier, since it is moved by constant currents from the north; there was no choice left but to return. No land has yet been found on which an advance toward the Pole would be likely to succeed; none of the lands we know seem to extend very far north of the latitude already reached.

Many people think that the North Pole can be reached through the air by a balloon or by balloon-ships, and that it will be so reached one day. I do not deny the possibility of this; on the contrary I regard it as very probable. But the only way at present would be to intrust one's self wholly to the wind, and this is no certain way so long as we have no knowledge of the wind-currents of these regions. A good result must in that case necessarily depend upon a combination of happy circumstances which are not common in the course of an ordinary human life. To go in a submarine boat under the ice would be rather risky, so long as submarine navigation is as little developed as it is at present. But is there no other way to reach the North Pole? It has already been mentioned that most polar expeditions have

been stopped by irresistible currents from the unknown north, carrying immense masses of thick floe-ice. From this fact we seem entitled to draw a very simple conclusion, namely, that if there are opposing polar currents there must somewhere exist one or several favorable currents; for the water carried southward by the polar currents from the unknown regions must somewhere return to these regions. As expeditions have been carried by the ice southward from the very threshold of the unknown region, others may be floated into that region if they can only strike the current on the right side. There we have the way already pointed out; the problem is to find the right place.

If we consider the experience of whalers and sealers who have sailed for a long series of years in the Arctic seas on both sides of the Pole, one singular circumstance must strike us at once, namely, that ships caught in the ice on the side of the Pole near the Greenland Sea are carried southward, and that their crews run, as a rule, no great risk. Not so on the other side of the Pole, north of Bering Strait; ships caught in the ice there drift northward and often disappear, some with few and others with many men on board; most of them probably are destroyed in high unknown latitudes. This fact must lead the thoughtful observer to the conclusion that there are differences in the sea currents which may be used in favor of a polar expedition. Let us, therefore, examine the question more closely.

The most important polar current is beyond comparison that which runs southward along the east coast of Greenland. This has a considerable speed and carries an immense quantity of water out from the polar basin. It fills the whole opening between Greenland and Spitzbergen, with the exception of a narrow belt along the coast of the latter. The breadth of the current must be at least 250 nautical miles. Its depth is difficult to determine, but it runs over the deepest known bottom in the Arctic regions; there are measured depths of 2,600 fathoms. I do not think, however, that we are entitled to assume that the polar currents are usually deeper than 300 fathoms; perhaps not deeper than 200 fathoms. At the depth mentioned the current has a breadth of about 170 nautical miles. It runs, of course, much quicker at the surface than in its deeper parts, and it is



MAP OF ARCTIC CIRCUMPOLAR REGIONS.

DRAWN BY JACQUES W. REDWAY.

(The currents and drifts are charted in accordance with the authorities quoted by Dr. Nansen.)

very difficult to get any certain information about its speed. Sometimes, especially in the summer months, it is very rapid, but at other times it seems to have a much slower course; the surface speed also, to a great extent, depends on the winds blowing during the time previous to the observation. Taking everything into consideration, I do not think we are entitled to estimate the average speed of the whole current for the year at more than two nautical miles a day. By this calculation we arrive at the conclusion that the polar current between Greenland and Spitzbergen carries southward between 80 and 120 cubic miles of water every twenty-four hours. Whence is all this water taken? It is evident that it cannot originate at the Pole itself; what flows out from the polar basin must be restored by water running in. It is also evident that the influence of a current so considerable as this cannot be limited to a small area; it must affect the polar basin like an immense pump, sucking the water even from the shores of Siberia and Bering Strait. This is the more certain as the polar basin is found to be unusually shallow wherever it has been measured.

There are only a few currents known which run into the polar basin. A small branch of the Gulf Stream is known to run northward along the west coast of Spitzbergen. This current is, however, narrow and very shallow, and thus is too insignificant to be of much value in this connection; to some extent it certainly also rounds the north coast of Spitzbergen, and returns southward again toward its eastern coast, partly through Henlopen Strait and Olga Strait and partly east of North East Land. Another branch of the Gulf Stream passes eastward to the north of Norway and enters the polar basin north of Nova Zembla. This current is considerable, and it often runs with a high speed along the coast of Nova Zembla, according to the common experience of Norwegian sailors. Our knowledge of it is not sufficient to enable us to form any certain idea about the quantity of water which it carries along; but according to the calculations of Prof. H. Mohn in his important memoir on the North Ocean\*

<sup>\*</sup>Prof. H. Mohn, "The North Ocean; Its Depths, Temperature, and Circulation. The Norwegian North Atlantic Expedition, 1876–1878." Christiania, 1887.

I think that we may assume that it carries at least sixty or seventy cubic miles of water every twenty-four hours into the polar basin. Next to this Nova Zembla current the most important current running into the polar basin is certainly that which runs northward through Bering Strait. This current seems to be of considerably more importance than former ideas about it would indicate.\* From descriptions of it that have recently appeared we learn that it very often runs northward with a speed of two knots and sometimes even of three or four knots. During the spring the current seems to have an average speed of two knots when it is not stirred by winds. It very often gives the impression of being an immense river flowing toward the north and carrying immense quantities of driftwood. Captain Hegemann tells us, for example, that in July, 1860, there was so much driftwood floating through the strait past the Diomede Islands that his ship could advance only very slowly, and that he was obliged to turn and twist about as if he were sailing through masses of floe-ice. We know too little of the speed of this current, during the various seasons of the year, to be able to say anything with certainty about the quantity of water which it carries into the polar basin. But if we assume that the average speed is as much as half a knot, and remember that Bering Strait, according to Dall, is 49.33 nautical miles broad and has an average depth of 23.5 fathoms, we must see that about fourteen cubic miles of water is running northward daily.

These two currents certainly furnish the most important supplies of water to the polar basin and to the polar current along the east coast of Greenland. A third addition of water to this basin, which I have thought a priori to be of much importance, comes from the American, and especially from the Siberian

<sup>\*</sup>According to H. W. Dall's paper, "Hydrologie des Beringsmeeres," etc. (Petermann's Mittheilungen, Vol. 27, pp. 261, 443; 1881), there should be no constant current running northward through Bering Strait, or at all events only a very slow and superficial one, while underneath a current should be running southward.

<sup>†</sup>Simpson, "Ice and Ice Movements in Bering Sea and the Arctic Basin." Hydrographic Office, Washington, January, 1890. Fr. Hegemann, "Das Eis und die Strömungsverhältnisse des Beringsmeeres," etc. "Annalen der Hydrographie und Maritimen Meteorologie," 1890.

rivers that run into it. The drainage area of all these rivers is very considerable, embracing nearly the whole of northern Asia, or Siberia, down to the Altai mountains and Baikal, besides the principal part of Alaska and British North America. The rain and snow of this region is not, however, very considerable, and the whole quantity of moisture falling over Siberia, I have calculated to be no more than about 626 cubic miles in one year. On account of evaporation we cannot assume that more than a small part of this water reaches the polar sea; perhaps not more than one cubic mile every twenty-four hours. This is not much, compared with the size of the ocean currents, but this addition is of special importance, as it consists of fresh and comparatively warm water, which for a very long time keeps at the surface of the sea on account of its lightness, and thus produces surface currents running northward from the Siberian coast. This is also the reason why there is so much open water along this coast every summer.

The fresh water thus flowing into the polar sea can only to a very small extent originate from this sea itself, as it is mostly covered by ice, and where open water exists the very low temperature in those regions prevents much evaporation. The moisture of the air over the area draining into the polar sea must consequently originate mainly in the Atlantic and Pacific Oceans. The moisture falling over the Polar Sea itself must certainly to some extent have a similar origin, since warm and moist air is attracted from lower latitudes by the low pressure of the air over the polar regions. This constant addition of fresh water must evidently be the reason why the water of the polar current between Greenland and Spitzbergen contains somewhat less salt, even at considerable depths, than the water of the North Atlantic seas. We thus see that the polar basin is daily receiving a large and constant inflow of water. As little evaporation takes place from its ice-covered surface, there must necessarily be a corresponding outflow, and the most natural outlet is the broad and deep opening between Spitzbergen and Greenland. According to what has already been said, the water running out here seems very nearly to correspond in quantity to the inflow mentioned. Currents also run southward through Smith Sound,

Jones Sound, and Lancaster Sound, in the Arctic Archipelago of North America, but as these sounds are very narrow and shallow, the body of water which their currents carry off is of little importance in this respect. The current running southward between Spitzbergen and Franz Josef Land is also insignificant when compared to the East Greenland current.

By regarding the before-mentioned contributions of water which the latter current probably receives, it may be possible to form some idea of the probable course of this current through the unknown regions. The waters of the North American rivers form, very likely, a part of the currents through the Arctic Archipelago of North America; a small part of the current through Bering Strait perhaps runs also in this direction. We have left, then, for the formation of the East Greenland polar current the principal part of the current through Bering Strait, the Siberian rivers, the Nova Zembla current, and the moisture falling over the polar basin. It seems quite natural that these sources should converge, and to some extent unite to form the Greenland current. We know also that the Nova Zembla current runs eastward or northeastward, while the current from Bering Strait runs westward. We must expect, therefore, to find the main body of the current which is formed in this way, lying somewhere to the north of the middle of that extended area from which it receives its converging sources, and this place must consequently be somewhere in the neighborhood of the New Siberian Islands. Here we also have the mouth of the Lena River, which carries a considerable body of comparatively warm water northward into the polar sea. From this region the current must naturally run in a northerly direction by the shortest way to the outlet between Spitzbergen and Greenland, and this must be to the north of Franz Josef Land and across or near the North Pole. But this course of the current may perhaps, to some extent, be disturbed by the winds. Let us examine which winds may be expected to be most prominent in these regions. So far as we know, a belt of low air-pressure seems to extend from the Atlantic Ocean along the south side of Spitzbergen and Franz Josef Land and into the Siberian polar sea. According to well-known meteorological laws, the principal direction of the winds on the south side of this belt of low pressure must be from west to east, and this will tend to cause a current in the sea along the north coast of Siberia. The actual existence of such a current was, in fact, observed by the Swedish "Vega" expedition. The winds on the north side of this low-pressure area must, however, blow principally in an opposite direction, and may consequently be expected to cause a water current across the Pole toward the Greenland sea.

I have tried to convince the reader that, from what we know about the water currents and the winds along the "threshold of the unknown regions," we are entitled, or in fact are obliged, to assume that these regions are traversed by an ocean current runing from the north of Siberia toward the Greenland sea. But is there no direct evidence of the existence of such a direct current? I think there are several. The American "Jeannette," under the command of De Long, was, on September 16, 1879, caught in the ice to the east of Herald Island (north of Bering Strait) at about latitude 71° north, and longitude 175° west. This is the only case in which we know exactly the drift of a ship caught in the ice north of Bering Strait. Like all other ships caught there, the "Jeannette" drifted toward the north and northwest, but her course was at first very irregular and to a great extent dependent on the various winds that blew. Her main drift, however, had a decidedly northwesterly direction; this course grew straighter and straighter the more the ship advanced westward, and during the last half year of her drifting she kept a pretty straight course, advancing northwestward with an average speed of no less than two miles in twenty-four hours, until she was crushed in the ice and sank on June 13, 1881, north of the New Siberian Islands, at about latitude 77° 15' north, longitude 155° east. This drift of the "Jeannette" shows that a current must be running northwestward from the sea north of Bering Strait, and it is possibly a direct continuation of the current passing through this strait. This current does not seem to have been very strong during the first part of the "Jeannette's" drift, as she was tossed about by various winds, but as she approached the region to the north of the New Siberian Islands the current seems to have had more influence on her drift, and the last week

before she sank she often drifted along with a speed of more than eight miles in twenty-four hours. This was near the region where I suppose the Greenland current to originate.

More remarkable, however, in this respect, than the drift of the "Jeannette" itself is the fact that a number of objects belonging to her or her crew, were found on an ice-floe near Julianshaab, on the southwest coast of Greenland, just three years after she had sunk (June 18, 1884).\* Among these objects the following may be mentioned here: 1, A list of provisions with the signature of De Long, the leader of the "Jeannette" expedition, written in his own handwriting; 2, a written list of the boats of the "Jeannette;" 3, a pair of trousers made of oiled linen, marked "Louis Noros," which is the name of one of the men saved from the "Jeannette" and still living.

When it was first made known that these objects had been found, some people in America were rather sceptical, and it was even pretended in American papers that the whole story was a lie. But how could it be so? What could the poor Eskimos of Greenland know about the "Jeannette" and her fate? The above-mentioned facts speak for themselves, and need no further testimony. We have consequently to deal with the fact that an ice-floe with objects from the "Jeannette" lying on it was found near Julianshaab. These objects must have been left on the floe either near the place where the "Jeannette" sank or somewhere on the route of her crew toward the Lena delta. From this region the floe must have been floated by sea currents to the southwest coast of Greenland where it was found. quite impossible that it could have come to this place through Smith Sound, Jones Sound, or Lancaster Sound, as the currents through these sounds run southward along the west side of Baffin Bay and Davis Strait along the east coasts of Baffin Land and Labrador toward Newfoundland. No ice or objects coming that way reach the southwest coast of Greenland, along which a

<sup>\*</sup>These objects, 58 in number, were found by some Eskimos and were afterward collected by the director of the colony of Julianshaab, Mr. Lytzen, who has described them in a paper in the periodical "Geografisk Tidskrift" (Vol. 8, 1885–86, pp. 49–51), which is issued by the Danish Geographical Society in Copenhagen.

current runs northward from the sea coast of Greenland and around Cape Farewell, carrying along all the floe-ice and foreign objects which are found on the southern part of the west coast. There can consequently be no doubt that the floe which carried these objects from the "Jeannette" was borne along by the East Greenland current.

The question therefore arises: By what route did it travel all the way from the New Siberian Islands to the east coast of Greenland? The shortest and most natural route would, of course, be across or near the Pole. There is, however, a possibility that the floe could have passed south of Franz Josef Land and Spitzbergen; let us therefore examine whether there is any probability of this. The floe must, in that case, have passed first between Franz Josef Land and Nova Zembla. There seems, however, to be no current running through this strait with a distinct western course. In the southern part of the strait a rapid and broad current is even running eastward.

The Norwegian sailors certainly think that they have observed a kind of current running westward along the south coast of Franz Josef Land and carrying floe-ice along, but this current is very slow and indistinct besides being quite narrow. The Austrians on board the "Tegethoff" (1872-74) were drifting in this strait during one year and a half, and were transported only from the north coast of Nova Zembla to the south coast of Franz Josef Land, while the objects from the "Jeannette" needed only three years to drift the long distance from the New Siberian Islands to Julianshaab in Greenland. In Austria Sound. among the islands of Franz Josef Land, the Austrians also observed a current carrying icebergs northward. Having passed south of Franz Josef Land the floe could not come through the strait between it and Spitzbergen, as the current there runs southward, so that it would necessarily be forced south of the latter. Having passed its south point, it must, however, have met with the before-mentioned Spitzbergen branch of the Gulf Stream and been floated northward. If it had not already melted then in the warmer water it might at last have met the polar current and been swept southward along its outer margin, all the time exposed to the warmer water coming from the

south and west. The floe would then, however, most probably either be melted, or broken into pieces by the sea, or driven out to Jan Mayen, and it is utterly improbable that it should be able to reach the west coast of Greenland in that way. But even if it were really possible that a floe could overcome all the difficulties of such a complicated route, it could not have travelled so far during so short a time as three years.

We are, consequently, obliged to assume that the floe found its way across somewhere to the north of Franz Josef Land, and the objects from the "Jeannette" thus prove with all desirable clearness that there really exists such a current across the polar region as we have already concluded does exist, from our knowledge of the currents of the northern seas.

But there is other evidence on which we can base our belief in the existence of such a current. Several years ago a "throwing-stick" of a peculiar shape was found on the west coast of Greenland, near Godhaab, and was afterward given by Dr. Rink to the ethnological museum of Christiania. Upon close exmination it appears that the only place where throwing-sticks of a similar shape occur is in Alaska, in the region of Kaviak Peninsula, Norton Sound, and the Yukon delta.† The throwing-stick is, moreover, ornamented with Chinese glass beads which the Alaskan Eskimos buy on the Asiatic side of Bering Strait. Thus it can have no other home than the west coast of Alaska, and it can only have reached Greenland in the same way as the objects from the "Jeannette."

A third proof that a current must be constantly running from the sea north of Bering Strait and the Siberian coast, is the considerable amount of Siberian, and to some extent also perhaps of American driftwood, which every year reaches the coast of Greenland. I have had the opportunity of examining a great deal of this wood on the west coast of Greenland as well as on the east coast. I have found it floating also on the sea

<sup>\*</sup>The "throwing-stick" or "harpoon-thrower" is a handle used by the Eskimos for throwing darts.

<sup>†</sup>See "The History of the 'Throwing-stick' which Drifted from Alaska to Greenland," by John Murdoch. "American Anthropologist," July, 1890, pp. 233-236.

among the floe-ice. Its appearance generally indicates that it has not been in the water for a very long time. For the Greenland Eskimos the Siberian driftwood is a condition of existence, as it gives them material for all their weapons, implements, boats, sledges, tents, houses, etc., etc. Without it they would be in great trouble, but they need not fear in that respect, for new quantities of wood are brought them every year by the polar current. Similarly, Siberian driftwood is found on Spitzbergen, especially on its northern coasts, and also north of this land among the ice-floes carried southward by the polar current from the north. This seems a good proof that the wood must be drifted across from Siberia, passing somewhere near the Pole.

A fourth proof that a current is constantly running across the polar regions is the thickness of the ice carried constantly southward along the east coast of Greenland. This ice is much thicker than any other ice masses known in the northern seas, the flat floes being forty or fifty feet thick, or even thicker. Ice of such thickness must have floated for a very long time in the sea, and as immense masses of similar ice are constantly carried southward, it cannot possibly have been formed in the sea north of Spitzbergen or anywhere near the Pole, for in that case it would not have had time to grow thick in floating to the lower latitudes where we meet it. Along the Siberian coast as well as in the sea north of Bering Strait the ice is always comparatively thin (seven to ten feet). This must indeed strike one as being very strange, considering that the Siberian sea, and especially the sea near the New Siberian Islands, is part of the coldest region known on the earth. The reason is evidently that the ice of these seas is every year carried northward by the currents, and it is the same ice which we find again in the East Greenland polar current, and which has grown thicker on the way across the polar regions.

By examination of a great many specimens of pumice found on the shores of Norway, Spitzbergen, and Greenland, Bäckström, a Swedish geologist, comes to the conclusion that they consist of andesites and cannot originate from any volcanic region in or near the Atlantic Ocean, as no pumice of similar structure and composition is known in these regions. The pumice stones

must therefore have been carried southward by the polar current, and must either have originated from unknown volcanoes in the polar regions or from the great andesitic volcanic regions near Bering Strait. The latter supposition seems to be the more natural, and the pumice stones then have been floated northward by the current through Bering Strait and across the polar regions, along the route followed by the throwing-stick from Alaska. And as great quantities of this pumice stone occur on the above-mentioned coasts there must have been a constant connection by the aid of sea currents between the latter place and the place where the pumice originated.

From all these facts we may seem fully entitled to draw the conclusion that a current is constantly running across the polar region somewhere north of Franz Josef Land from the sea north of the Siberian coast and Bering Strait, and into the sea between Spitzbergen and Greenland. Since such a current exists, the most natural way of reaching the North Pole, or a point quite near it, must be to enter the current on the side where it runs northward, that is, somewhere near the New Siberian Islands, and let it carry one straight across those unknown regions which it has prevented so many from reaching. There are two methods of trying to obtain this result: first, to build a strong ship so constructed that it can withstand the pressure of the ice, and, living in this ship, to float across with the ice; or second, to take only boats along, encamp on an ice-floe, and live there while floating across.

My plan is based on the use of both of these methods. I shall build a wooden ship as small and as strong as possible; it shall be just big enough to carry provisions for twelve men for five years, besides the necessary coal; a vessel of about 200 tons will suffice. It shall have an engine strong enough to give a speed of six knots, and, besides, it shall have full rig for sailing. The most important feature of the ship will be that she shall be built on such lines as will give her the greatest power of resistance to the pressure of the floe-ice. Her sides must not be perpendicular, as those of ships generally are, but must slope from the bulwarks to the keel; or, to use a sailor's expression, her "dead rise" must be made great, so that the floes shall get no

hold of her when they are pressed together, but will glide downward along her sides and under her, thus tending to lift her out of the water. The sides of most ships used in the Arctic seas have been almost straight up and down, in spite of which defect they have stood the pressure of the ice pretty well, and many of them have even been lifted completely out of the water and have for longer or shorter times stood dry on the ice without being damaged. Though the "Jeannette" had a shape which in this respect was very bad, she managed to withstand the ice pressure for nearly two years. It will consequently be understood that a very slight alteration of shape will give us a very strong ship, and one which can scarcely be crushed by the ice if it is properly handled. For the same reason the vessel ought to be as small as possible, as the lighter she is, the more easily she will be lifted by the ice, and the less pressure there will be on her sides; it is also easier to make a small vessel strong than a big one. A small ship has other advantages, as it is more convenient to navigate and to handle in the ice, and as it is easier to find good and safe places for it between the floes.

The building of this vessel is just about to begin. She will be built of excellent oak, her sides will be made very thick, and inside she will be strengthened by a system of strong beams and braces. Her bow will be extraordinarily strong. Outside she will have two oak plankings, one without the other, and outside of these a third planking of hard oak or greenheart. I am also thinking of giving her a thin sheathing of mild steel several feet broad along the water-line, in order that the ice shall not be able to cut into and damage her wooden sides when it is pressed against them. The difficulty will be, however, to fasten this sheathing properly. I feel certain that the ship will be the strongest ever used in the Arctic regions, and that she can be crushed only in an extraordinary combination of circumstances. With this vessel, and a crew of ten or twelve strong and wellpicked men, besides an equipment for five years as good in all respects as modern appliances can afford, I think the enterprise has a good prospect of success.

Captain Otto Sverdrup, who accompanied me on the journey across Greenland, is going to take command of the ship. Among

the crew there will also be four or five scientific men, who will help with the scientific observations, etc. It was my intention to start in February of next year, but I fear that we shall not be able to get ready by that time. In the summer I intend to go through Bering Strait and along the north Siberian coast toward the New Siberian Islands. From the experience of American whalers it appears generally possible to pass Bering Strait in June. When we have arrived at the New Siberian Islands we shall have to wait for the right moment to reach the farthest possible point north in the open water. I think this will probably be in August or in the beginning of September. To be able to get a better view of the surroundings, and to examine in what direction there is open water, etc., I think of using a captive balloon from the ship. At the most favorable moment we must push northward as far as we can. This will be very likely along the western coasts of the islands, as I expect to find most open water there. When we can get no farther we shall have nothing left but to run into the ice at the most favorable spot. We shall then be in the current which the "Jeannette" struck, and, like her, shall be carried northwest. The ice will perhaps soon begin to press, but it will only lift our strong ship, and this will give us good quarters on the floe. While drifting we shall have plenty of time and excellent opportunity to make scientific observations of great importance. Probably we shall in this way, in the course of some years, be carried across the Pole or near it, and into the sea between Spitzbergen and Greenland, where we shall get into open water again and be able to return home.

There is, however, a possibility that the ship, in spite of all precautions, may be crushed in the ice; but if this happens the expedition will have another resource. It will now be time to use the ice as quarters instead of the ship, and we shall have to move all our provisions, coal, boats, etc., to the ice-floe and encamp there. For this purpose we shall probably, besides the common light boats, take a boat big enough for all our men to sleep in. This boat will be like a second ship, only on a much smaller scale; and as it will stand on an ice-floe it cannot be crushed. Besides we shall take warm and light tents made of

a double layer of canvas, or some similar stuff, well filled between with reindeer hair. That there is no great risk in leaving the ship and taking refuge on the drifting ice-floe, we have to some extent learned during our Greenland expedition. Other expeditions have drifted in a similar way for considerable distances and during many months, without an accident. I need only here mention the "Hansa" crew, and the men from the American "Polaris" expedition. In the polar regions specially one would run no risk by drifting on the floes, as the waters there are mostly covered by floating ice and are consequently quiet. There is therefore no surf, which in other regions may be rather disagreeable, judging from our experience in the drift-ice on the east coast of Greenland. When we emerge into open water on this side of the Pole, either near Spitzbergen or near Greenland, there will not be much difficulty in returning home in our boat.

There is, of course, a possibility that we may be stopped by unknown lands near the Pole, or that we may strike an eddy or a side current, but I cannot understand that we run any risk in either of these cases. If, in the former case, we should fail to get our ship afloat again, we should have to leave her, and with our boats and necessary equipment strike out for the nearest current to drift on again, or return homeward dragging our boats over the ice. But if the distance should be too great, we should leave all boats and, taking only sledges with necessary provisions, etc., besides plenty of canvas, walk on until we reached Spitzbergen or any other land where there is open water; here we would make boats of canvas, or perhaps of the skins of seals and walruses, like those we made in Greenland. In the latter case a side current must bring us somewhere, it cannot forever run in a ring near the Pole; and wherever we come near the coasts of the polar sea we shall have no difficulty in returning home. It may be possible that the current will not carry us exactly across the Pole, but it will probably not be very far off, and the principal thing is to explore the unknown polar regions, not to reach exactly that mathematical point in which the axis of our globe has its northern termination.

To say how long such an expedition will last is, of course, not easy, as this to a very great extent will depend on the current.

As we have seen, the objects from the "Jeannette" drifted in three years from the New Siberian Islands to the west coast of Greenland. If we assume that they required one year for the drift southward from latitude 80° north, on the east coast of Greenland, only two years remain for the rest of the journey, and this requires a speed of no more than two nautical miles in every twenty-four hours. This does not seem too high a rate when we remember that the "Jeannette" drifted at the same speed during the last half year of her drifting, and that in the last days before she sank she drifted at a much higher speed, which sometimes reached even eight nautical miles every twenty-four hours. It cannot therefore be considered improbable that we should reach open water on this side of the Pole within two years after our start from the Siberian side; and if we take provisions for five years we may consider that we have an ample margin.

It will be no holiday trip, this drift through regions where the days last six months, and the nights are no shorter; but it is not to seek pleasure that we go out. People perhaps still exist who believe that it is of no interest or importance to explore the unknown polar regions. This, of course, shows ignorance. It is hardly necessary to mention here of what scientific importance it is that these regions should be thoroughly explored. The history of the human race is a continual struggle from darkness toward light. It is therefore to no purpose to discuss the use of knowledge; man wants to know, and when he ceases to do so, he is no longer man.

The expense of the expedition, the plan of which I have above described, will be met in Norway. The Norwegian National Assembly granted last year a sum of 200,000 kroner (\$55,000) toward the expenses, and about 107,000 kroner (\$30,000) are given by the Norwegian king and twelve private citizens in Norway. This will, I believe, be about sufficient, and the expedition will start as soon as we can get ready.

FRIDTJOF NANSEN.

LYSAKER, near Christiania, Norway.

## WILL DR. NANSEN SUCCEED?

WHILE it is impossible to enter fully into detail about Dr. Namsen's scheme of polar exploration within the limits of a magazine article, yet the essentials can be discussed. To begin, it is advisable to point out the erroneous impression conveyed by his opening sentence, that the sledge journey of Lockwood to Cape Washington was a search for the already discovered northwest and northeast passages, or, indeed, that it was a polar search at all. The international expeditions of 1882-83 were not exploring expeditions similar to those of Parry, Franklin, Kane, Hall, Hayes, Nares, DeLong, and Nansen; they were sent forth for simultaneous and comparative observations of magnetic, meteorological, and other physical conditions. Lockwood's journey, while it resulted in reaching the highest north yet attained, was only an incident of his attempt to trace the extension of Greenland, which was believed by some to extend eastward or southward of Cape Britannia. If Lockwood and Brainard had tried to reach the North Pole, they would have crossed the 84th parallel. They could have crossed it had they gone due north from Cape Neumayer, or if the two days that they spent in determining their position at Lockwood Island had been devoted, instead, to a journey due north, and if they had determined the farthest point reached, as Hayes and Markham did, by a meridian altitude.

No, it was not a polar quest, and it succeeded beyond expectation, although Nansen asks: "Why did all previous attempts fail?" "The reason," he continues, "is simple enough," and then he dwells on the "immense impenetrable masses" of drifting floe-ice. Travel along the north coast of Greenland is safe and practicable, and, if geographical work had been the object and end in view, the Lady Franklin Bay expedition would have landed at Thank God Harbor, from which a latitude of 85° north would have been far easier for Lockwood and Brainard to

reach than their farthest point—83° 24′—was from Lady Franklin Bay, while they were working, with an open but ice-filled strait 20 miles wide between field-work and home station, for eight months in the year.

Recurring to the main topic—the Norwegian expedition—it strikes me as almost incredible that the plan here advanced by Dr. Nansen should receive encouragement or support. It seems to me to be based on fallacious ideas as to physical conditions within the polar regions, and to foreshadow, if attempted, barren results, apart from suffering and death among its members. Dr. Nansen, so far as I know, has had no Arctic service; his crossing of Greenland, however difficult, is no more polar work than the scaling of Mount St. Elias. It is doubtful if any hydrographer would treat seriously his theory of polar currents, or if any Arctic traveller would indorse the whole scheme.

There are perhaps a dozen men whose Arctic service has been such that the positive support of this plan by even a respectable minority would entitle it to consideration and confidence. These men are: Admirals McClintock, Richards, Collinson, and Nares, and Captain Markham, of the Royal Navy, Sir Allen Young and Leigh Smith of England, Koldewey of Germany, Payer of Austria, Nordenskiold of Sweden, and Melville of our own country.

I have no hesitation in asserting that no two of these believe in the possibility of Nansen's first proposition—to build a vessel capable of living or navigating in a heavy Arctic pack, into which it is proposed to put his ship. The second proposition is even more hazardous, involving as it does a drift of more than 2,000 miles in a straight line through an unknown region, during which the party in its voyage (lasting two or more years, we are told) would "take only boats along, encamp on an ice-floe, and live there while floating across."

Let us briefly dwell on the three main points: first, favorable sea-currents; second, the indestructible ship; and last, the practicability of boat life and navigation under known conditions of polar travel. While the last two are matters falling within the domain of comparative experience, the first point is almost purely theoretical. Even did space permit, it would be useless

to examine fully Dr. Nansen's statements regarding the favorable polar currents which he counts on as his means of reaching the pole. His mental attitude is shown by his treatment of Dall's careful and scientific work of months in the investigation of Bering Strait; these results are coolly discarded on the strength of such casual observations as chance to confirm Dr. Nansen's theory. Let us pass to the supposed drift-relics found on the west coast of Greenland, dwelling on which at length Nansen says: "The objects from the 'Jeannette' thus prove, with all desirable clearness, that there really exists such a current across the polar region." No careful investigator would deny the possibility of such a drift, but it appears that before sending out a polar expedition on the basis of the drifting of "Jeannette" relics to the west coast of Greenland, it would be a judicious course to secure an identification, especially as it could be done in a few weeks and at an expense of a few cents for postage.

Dr. Nansen, however, adds:

"When it was first made known that these objects had been found, some people in America were rather skeptical, and it was even pretended in American papers that the whole story was a lie. . . . The above mentioned facts speak for themselves, and need no further testimony."

It is pertinent to say that "some people in America" are still "rather skeptical" and of those the most important witness is the only living officer of the "Jeannette," Commodore Melville, chief of the bureau of steam engineering, United States Navy. He has several times stated to me his firm conviction that the articles mentioned in the published account could not be from the "Jeannette." Within a few weeks, he has reiterated his disbelief that any articles from the "Jeannette" were thus found, and adds that when the objects were said to have been discovered, he suggested to a member of the Danish Geographical Society the desirability of identifying the relics. Melville wrote that he would travel 500 miles to identify any articles that might be sent to any Danish consul or other official in this country.

Probably drift articles were found, and it would seem more reasonable to trace them to the "Proteus," which was wrecked in Smith Sound, about 1,000 miles north of Julianshaab. The drift of the "Resolute" in 1853, of the "Fox" in 1859, and of the

"Polaris" party in 1872 show, what is well known from other sources, that there is a steadily-flowing current southward from Smith Sound into the Atlantic. The "Proteus" sank in July, 1883, so that a drift of eleven months must have brought southward many articles; and, while a current flows north along the coast of Greenland, yet it must frequently receive ice and other drift from the southward current somewhat off shore.

It is further important to note that, if the articles were really from the "Jeannette," the nearest route would have been not across the North Pole, along the east coast of Greenland, but down Kennedy Channel and by way of Smith Sound and Baffin Bay, as was suggested as to drift from the "Proteus." Smith Sound was full of floating ice all the autumn and winter of 1883–84, drifting steadily southward, as all at Cape Sabine then realized too sadly. Such a route is hundreds of miles shorter than the one outlined by Nansen, and even one hundred miles is a great distance in the polar pack.

Grant, however, that the alleged "Jeannette" relics are genuine, and that they passed to the northward of Franz Josef Land; it by no means follows that, if Nansen should drift in the same direction, he would pass within several hundred miles of the North Pole. No man knows what are the exact physical conditions at the North Pole, but we do know, almost as well as if we had seen it, that there is in the "unknown regions" an extensive land, which is the birthplace of the flat-topped icebergs or paleocrystic ice. I have seen the original drawings and photographs of the remarkable Antarctic ice observed by the "Challenger" expedition, and its identity with the paleocrystic ice of the North is beyond question. The well-known scientist, the late Dr. W. B. Carpenter, clearly indicated the manner in which are formed enormous ice-floes, from 1,000 to 2,000 feet thick. This heavy ice was seen in the Arctic regions by Maclure northeast of Bering Strait; by Leigh Smith, in great quantities as he informs me, along the northwest coast of Franz Josef Land; and by Nares and by my own expedition to the north of the Smith Sound region. Occasionally, pieces have been seen along the east coast of Greenland; elsewhere, this ice is unknown

In other words, this ice forms on an extensive land area, and

is seen only in the half of the polar regions which lies to the north of America, Greenland, and Nova Zembla. Carpenter estimates the circumference of the Antarctic ice-cap at 10,000 miles, and from it comes ice 2,000 feet thick. I have seen a flattopped berg which must have been from 800 to 1,000 feet thick, and it would be reasonable to assume that the ice-cap from which it came must be, say, 300 miles in diameter. Such an area of ice-capped land must be very peculiarly placed if, sending forth flat-topped bergs to Franz Josef Land and Greenland, it does not include the Pole within its limits.

As to the indestructible ship, it is certainly a most desirable structure for Dr. Nansen, who proposes to enter Bering Strait, where, as he admits, "ships caught in the ice drift northward and often disappear forever." Out of the two score or more ships which have been completely beset by the pack to the north of Bering Strait, he will find it difficult to name one which has ever reappeared, or one from which the whole crew has escaped. Dr. Nansen appears to believe that the question of building on such lines as will give the ship the greatest power of resistance to the pressure of the ice-floe has not been thoroughly and satisfactorily solved, although hundreds of thousands of dollars have been spent for this end by the seal and whaling companies of Scotland and Newfoundland. So well built as regards lines and strength was the "Proteus" of St. John's that she was once beset in heavy ice off Labrador and for 30 days was completely out of water; but she succumbed immediately to the heavy floes of Smith Sound.

On this point, Melville, from his training and experience especially competent as an authority, says:\*

"I consider it impossible to construct a floating body which will be able to resist the tremendous strain of the polar ice-packs; it might not be crushed for months, but the contingency might arise the first day that two floes would close on it and overwhelm it like an almond in the jaws of a nut crack. For the wonderful potency of these floes is incredible, and can only be calculated in millions of tons, or rather square miles of ice, averaging twenty-five feet in thickness, or forty feet where the usual winter's growth of ten or twelve feet is rolled up into hummocks; telescoping and piling up, these vast masses form the greatest gorges, which only the hydraulic power of nature can move."

<sup>\* &</sup>quot;In the Lena Delta," p. 475.

Every Arctic navigator of experience agrees with Melville's dictum that, even if built solid, a vessel could not withstand the ice-pressure of the heavy polar pack. Even if the strength of the ship should be such as successfully to resist the pressure, or if her lines would enable her to rise unharmed above the closing floes, yet the dangers are nearly as great from the disruption of the pack, or from the pressure of overhanging ice masses which Back experienced in the "Terror" and Hall in the "Polaris."

But it may be said that the experience of the "Terror" in Hudson Strait and of the "Polaris" in Thank God Harbor need not be feared in the proposed route, since Nansen reassuringly states that "along the Siberian coast as well as in the sea north of Bering Strait, the ice is always comparatively thin (seven to ten feet)." One needs only to consult Melville's "In the Lena Delta" to see how fully the actual experience of the "Jeannette" refutes the opinion of Dr. Nansen. Melville, giving an account of the gale in January, 1880, says:\*

"The placid and almost level surface of ice suddenly heaved and swelled into great hills. . . . Giant blocks pitched and rolled. . . . Sunk in an amphitheatre, above five eighths of a mile in diameter, lay the ship, the great bank of moving ice, puffed in places to a height of fifty feet, gradually inclosing her on all sides. . . . Certain it is that had the 'Jeannette' been two hundred yards in any direction out of the exact spot she then occupied on the floe, she would have been overwhelmed and destroyed by the grinding masses, as readily as a 'sojer crab' on the beach is buried beneath the roll of the surf."

In another place,† describing a scene where the "Jeannette" duplicated the experience of the "Terror," Melville says:

"Huge floe-bergs as large as churches bobbed up and down like whales... There was imminent danger of the hummocks and bits weighing from twenty to fifty tons toppling over, as they were on all sides crushing or burying her... Suddenly the floe split along the port side, parallel with the keel, leaving a long lane of open water, with the starboard side still imbedded in the ice as in a mould... Should the floe pieces come together again and overlap or under-run, the 'Jeannette' would be crushed like an egg-shell. '.. The ship became entirely surrounded by the towering, telescoping hills of ice."

The "Hansa" of the second German Arctic expedition, Cap-

tain Koldewey, had lines which enabled her to rise, but she was wrecked nevertheless. The account runs:

"But soon some mighty blocks of ice pushed themselves under the bow of the vessel, and although they were crushed by it, they forced it up, slowly at first, then quicker, until it was raised seventeen feet out of its former position on the ice."

Lastly, all drift experiences have entailed terrible hardships and dangers, even when the explorers have been floating toward daylight and warmth, as in the boat journey of the "Polaris" in Baffin Bay and in that of the "Hansa" on the east coast of Greenland. Note one instance only after the loss of the "Hansa": \*

"The floe surrounding us split up; a heavy sea arose. Our field began to break on all sides. On the spot between our house and the piled-up store of wood, which was about twenty-five paces distant, there suddenly opened a huge gap. Washed by the powerful waves, it seemed as the piece just broken off was about to fall upon us, and at the same time we felt the rising and the falling of our now greatly reduced floe. All seemed lost. From our split-up ice-field all the firewood was drifting into the raging sea. And in like manner we had nearly lost our boat 'Bismarck'; even the whale boat was obliged to be brought for safety into the middle of the floe. The large boat, being too heavy to handle, we were obliged to give up entirely. All this in a temperature of —9.5° C. (+15° Fahr.) and in a heavy storm, was an arduous piece of work. The community was divided into two parts. We bade each other good-by with a farewell shake of the hands, for the next moment we might go down."

Equal dangers could be quoted from the record of the "Polaris" drift, and from my own experiences—but enough. Imagine, if one can, the horrors which a drift-journey in boats would entail, even in latitude 84°, with five months of unbroken night and continuous cold of extreme severity. Even if the travellers were spared by the ice-pack, disability of a single man from frost bites, scurvy, or other disease would, in a critical situation, necessitate, as in DeLong's case, sacrifice of the main party, or the heartless abandonment of a comrade.

Arctic exploration is sufficiently credited with rashness and danger in its legitimate and sanctioned methods, without bearing the burden of Dr. Nansen's illogical scheme of self-destruction.

A. W. GREELY.

<sup>\* &</sup>quot;The German Arctic Expedition," Capt. Koldewey, p. 131.

# FINANCIAL.

## THE CAUSES OF GOLD EXPORTS.

The shipment of 60 millions of gold to Europe in the short space of a few months, the most of it in less than two months, is an event in finance so notable, as in its causes to be well worth the study of every one interested in the public good.

The magnitude of the movement first arrests attention. What do 60 millions represent? Let us reflect that the entire coin held by the Bank of England, in ordinary times, is only about 100 millions, and that this amount serves mostly for the reserve, not only of that bank itself, but also for all the great banks of London and is, in fact, the pivot on which turn the great commercial transactions of the world of which London is the settling centre. Again, 60 millions is about all the gold remaining in the vaults of the associated banks of New York, the reserves of which play so important a part in the business activities of the United States. This amount, then, is of immense importance, and is so especially at the present time, when the public mind is so sensitive, in view of the great flood of depreciated silver which is being poured into our circulation. Let us, then, look with care into some of the causes of this transfer from our shores of this great amount of the representative of the world's wealth.

The condition of fiscal affairs abroad for some months past has been one of disturbance and apprehension; the great failure of the Barings led prudent men the world over to pause and to prepare for other storms which might follow. Especially did it direct attention to the small reserves of the English banks—relatively much less than our own. Mr. Goschen wisely chided this weakness of those banks in one of his public speeches during the last winter. Distrust on the Continent contributed to similar action on the part of the bankers and brokers there, and we thus witness a strengthening, all along the line, of the reserves of the great institutions of Europe. At the same moment, the great Russian bear reaches out his paw and gathers into his own sub-treasury, called the Imperial Bank, his great deposits of cash, estimated by some as high as 100 millions of dollars.

This concerted scramble for the precious yellow coin strikes at the hoards in the United States in some ways which it will now be of interest to consider. Immense amounts of American securities have been sent to Europe in years past and have been largely marketed there. They have also served as collateral to large loans made by bankers and others, and have thus served to even up, till now, any

balances of trade made against us. We witness now a cessation of such shipment of securities and a calling in of such loans, which have now to be made in our own market. At the same time currency bonds held by European investors have, to some extent, been sent back to be sold; and the proceeds, if not reinvested in bonds payable in gold, have been remitted to the owners. Again, the great importations of the past year, in view of the change in the tariff, have been distributed throughout the country, and every dollar's worth of them, wherever sold, has to be remitted for to New York, where the money makes but a short stop in its transit to Europe. There, heavy importations have continued into the present year, and they are now supplemented by the great tide of American travel, which always plays so important a part in our foreign exchanges. It should be remembered that if the number of travellers is 60,000, and each one spends \$1,000, our amount of 60 millions is accounted for at once.

The spring, again, is the time when we have less produce to send abroad, and this is specially felt the present year in consequence of the poor crops of the last year. It is at this season, also, when the rate of exchange is high, that our bankers are in the habit of drawing against their credits, and such drafts, with perhaps one renewal, mature when a lower rate of exchange enables the bankers to repay at a handsome profit. Such drafts, however, at the present time are not, it is supposed, wanted for discount in the great money centres of Europe, and hence gold has to take their place.

It is not improbable, also, that distrust of the currency of our own country has contributed its share to driving from our midst this large stock of the precious metal. Heretofore we have sent abroad annually a large quantity of silver, which now has to be bought and put into circulation at home, and gold has to take its place in the adjustment of our debit balances abroad. The fear of a silver basis on the part of many timid people has led to the locking up of more or less gold; and why should foreign fears be less than our own? It is known, also, that large amounts belonging to the great Canadian banks are usually loaned in this market. It would be easy to transfer some part of such loans to Europe, where it is certain that they would remain gold, and where gold has for the most part, of late, been available at as high a loanable rate as in our own market. While it is not generally believed that the distrust of our being able to remain on a gold basis has been a very important factor in our recent gold exports, yet some mention of it is necessary in enumerating the causes of this movement.

We have thus seen that a combination of conditions has brought about this notable event in finance which we have been considering, and we might indulge a thought of pride that our great country has stood the strain so easily, were it not that we have to remember that the larger part of our remaining circulating medium is of less intrinsic value than the part we have sent away.

# WRITERS IN THE AUGUST FORUM.

DR. FRIEDRICH HEINRICH GEFFCKEN (born in Hamburg, 1830) is professor *emeritus* of international law in the University of Strasburg and an Imperial Privy Councillor. He is the author, among other books, of "State and Church;" "Socialism;" and "The Papacy."

MR. ISAAC A. HOURWITCH (born of Jewish parents in Russia in 1860) was a political exile in Siberia in 1881-85. In 1887 he was admitted to the bar, and in 1890 he escaped arrest by coming to the United States. He is the author of several sociological monographs.

BARON DE HIRSCH, the Hebrew philanthropist, has given large sums for the relief of his co-religionists in Russia, including \$2,400,000, known as the American Baron de Hirsch fund, for the benefit of Russian Hebrew immigrants to this country.

GEN. FRANCIS A. WALKER (born in Boston, 1840) was superintendent of the census in 1870 and 1880. In 1881 he became president of the Massachusetts Institute of Technology.

SEÑOR RICARDO L. TRUMBULL was born of American parents, in Talcahuano, Chili, in 1860. He was graduated at Yale in 1881. In 1888 he was chosen to the Chilian Congress as a Radical, and he is now a confidential agent of the congressional government.

GEORGE EDWARD WOODBERRY (born in Beverly, Mass., 1855) was graduated at Harvard in 1877. He is by occupation a writer on literary subjects, and a constant writer for critical journals. For the next year he will be professor of English at Columbia College.

Mr. Simon Sterne (born in Philadelphia, 1839) is a lawyer in New York City. He has long been active in railway matters, and is the author of a number of books on public questions.

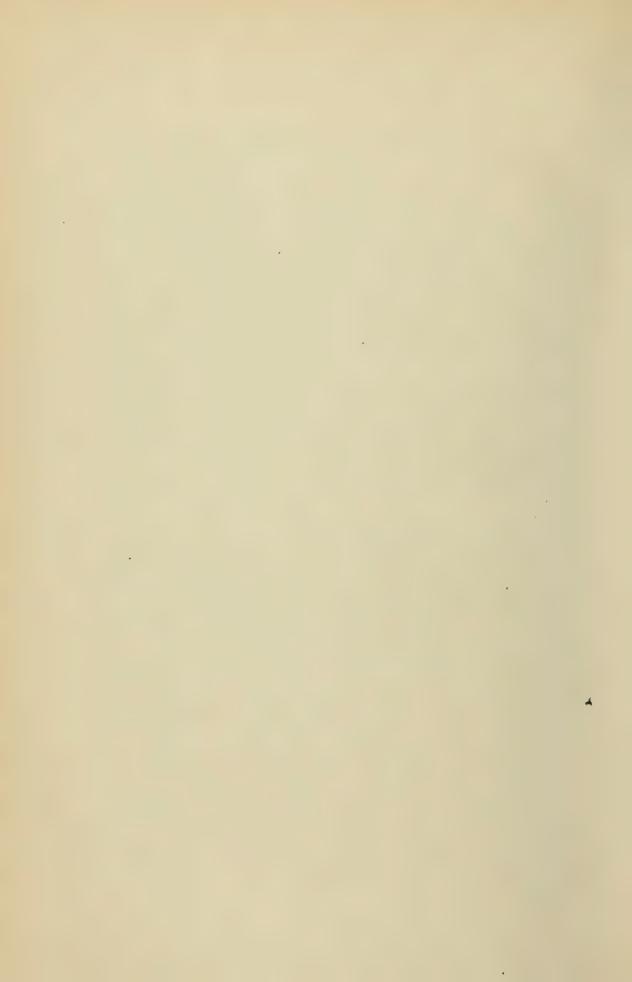
GEN. LIONEL ALLEN SHELDON (born in Otsego Co., N. Y., 1829) served in Congress in 1869–75. He was governor of New Mexico in 1881–85, and recently has engaged in fruit-culture in California.

MR. EDWARD P. CLARK (born in Huntington, Mass., 1847) is a member of the editorial staff of the New York *Evening Post*. He was graduated at Yale in 1870 and has since been engaged in journalism.

DR. FRIDTJOF NANSEN was the first Arctic explorer to cross Greenland, performing the journey on foot. He is a Norwegian.

GEN. ADOLPHUS WASHINGTON GREELY (born in Newburyport, Mass., 1844) entered the army in 1861, was in command of the well-known Greely Arctic expedition in 1881, and in 1887 became chief of the signal-service corps. He is the author of "Three Years of Arctic Service."

MR. G. G. WILLIAMS is the president of the Chemical National Bank of New York City.



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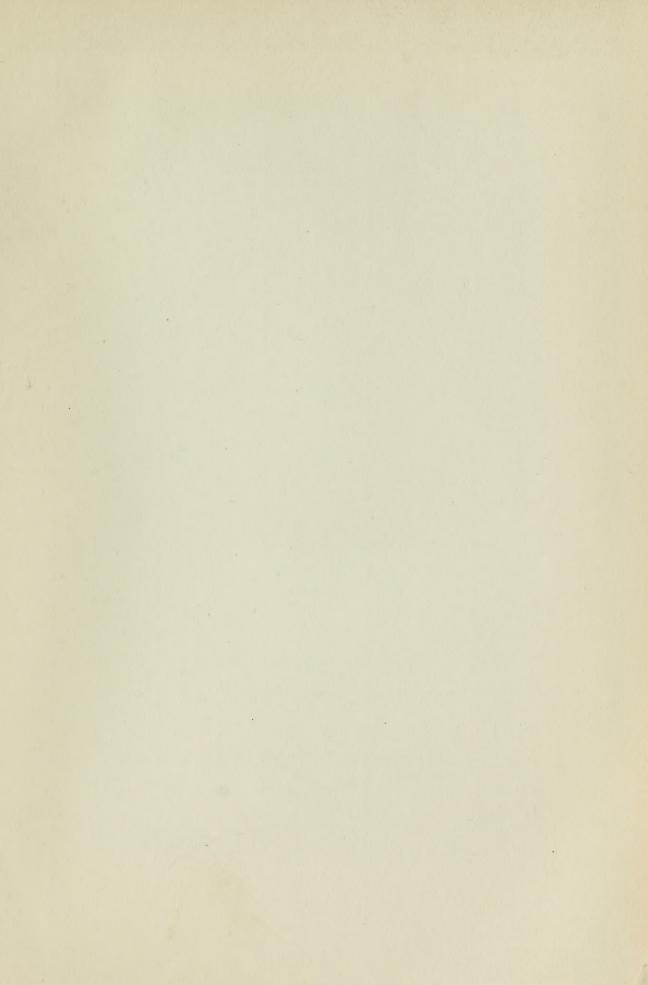
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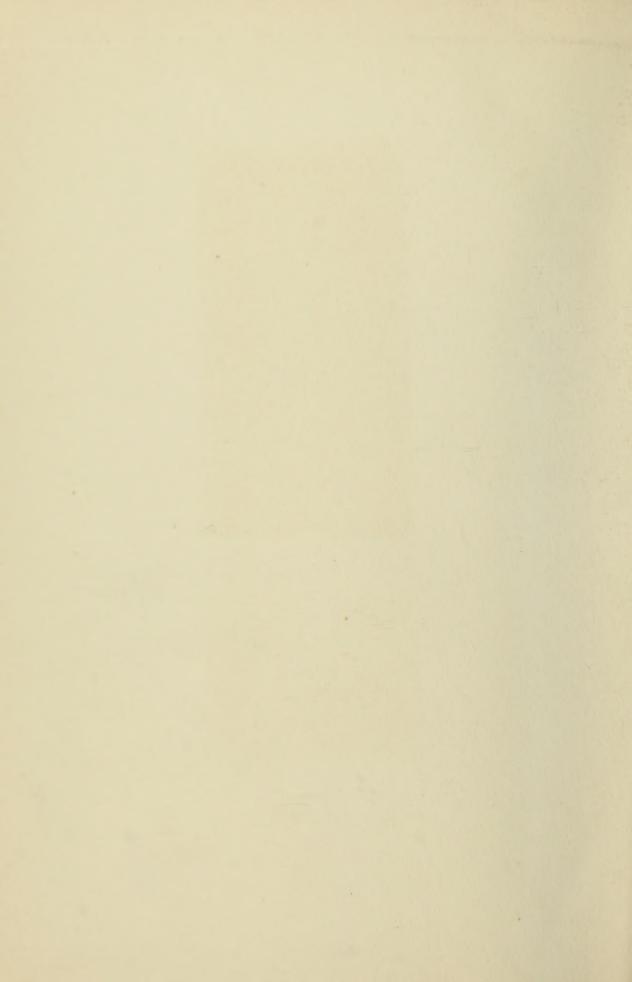
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